MARQUESAS AREA FISHERY AND ENVIRONMENTAL DATA, OCTOBER 1957 — JUNE 1958

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United States Department of the Interior, Fred A. Seaton, Secretary Fish and Wildlife Service, Arnie J. Suomela, Commissioner



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By

Robert C. Wilson
Eugene L. Nakamura
and
Howard O. Yoshida
Fishery Research Biologists
Pacific Oceanic Fishery Investigations
U. S. Fish and Wildlife Service
Honolulu, T. H.

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ABSTRACT

This report presents the biological, environmental, and meteorological data from four consecutive cruises, October 1957 to June 1958, in the part of the southeastern Pacific Ocean that is centered in the Marquesas Islands. Primary mission of these cruises was to define the season of greatest availability of surface tuna schools in the Marquesas area.

Tabulated data include the following: observations of weather, water color, and water transparency; determinations of zooplankton volumes, surface salinities, and phosphates; observations at bathythermograph lowerings, tuna school sightings, surface fishing operations, and baitfish surveys.

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The purpose of this report is to present the record of observed data made during four consecutive cruises in the part of the southeastern Pacific Ocean that is centered in the Marquesas Islands. The cruises were part of a program undertaken by the Pacific Oceanic Fishery Investigations (POFI) to study the tuna resources of the southeastern Pacific. It is the third POFI report which presents observed data from this area. The first (Austin 1957) contains the record of observed data made during cruises in August and September 1956. The second (Wilson and Rinkel 1957) contains results from cruises made during January-March 1957.

In order to make these data rapidly available to other agencies studying the Pacific Ocean, they are presented here without analysis. Descriptive and analytical reports will follow.

The primary mission of the four expeditions was to continue the surface tuna school surveys in the Marquesas area, with the cruises scheduled so that the season of greatest availability of tuna schools might be revealed.

Secondary missions were to continue the study of the biology of the tuna and of live-bait resources in the Marquesas area, to continue the marking of tunas with the D-2 dart tag (Yamashita and Waldron 1958) and to continue studies of the abundance and distribution of tuna larvae.

Two POFI research vessels, the <u>Charles H. Gilbert</u> and the <u>Hugh M. Smith</u>, were assigned (fig. 1). In order to accomplish the primary mission, two types of surface tuna school surveys were carried out, the inshore and the offshore (fig. 2). The cruise and survey dates are listed in table 1.

In addition, another important mission was included in cruise 45 of the Smith. In cooperation with the R/V Horizon of the Scripps Institution of Oceanography, a study of the Equatorial Undercurrent was carried out during the period April 4-29, 1958, as part of the International Geophysical Year program. Preliminary results of this survey have been reported by Knauss and King (1958).

Table 1. -- Marquesas Islands cruises

Vessel and cruise No.	Carrier	Surv	ey dates
vesser and cruise No.	Cruise period	Inshore	Offshore
Charles H. Gilbert 35	Oct. 2-Dec. 14, 1957	Oct. 14-20 Nov. 24-30	Oct. 24-Nov. 6
Hugh M. Smith 43	Jan. 3-Feb. 25, 1958	Jan. 18-25	Jan. 27-Feb. 12
Charles H. Gilbert 38	Feb. 7-May 2, 1958	Feb. 27-Mar. 8 April 11-19	Mar. 26-Apr. 8
Hugh M. Smith 45	Mar. 28-June 23, 1958	June 1-10	May 14-29

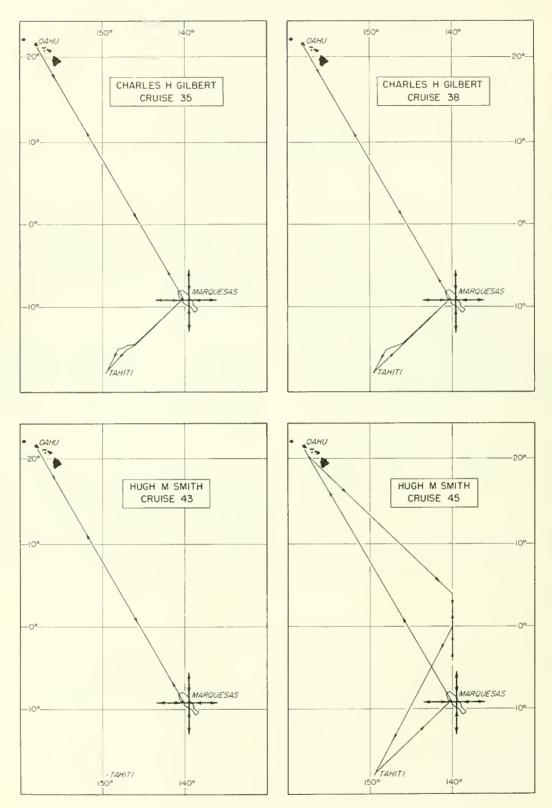


Figure 1. -- Vessel tracks of four cruises.

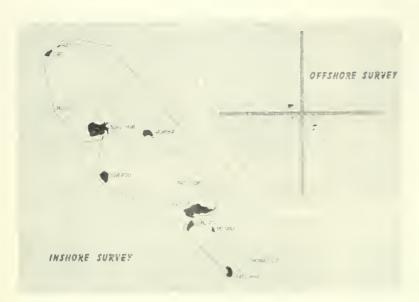


Figure 2. --Standardized inshore and offshore survey tracks, Marquesas area.

FIELD PROCEDURES

Bathythermograph and Meteorological observations

Except where noted below, bathythermograph (BT) lowerings on the four cruises were made according to the following schedule: every 6 hours between Honolulu and latitude 11°N., every 3 hours between latitude 11°N. and the Marquesas, local noon daily in the Marquesas area while on both inshore and offshore surveys, every 3 hours on the offshore survey, at each tuna fishing station, and every 6 hours on the run between Tahiti and the Marquesas.

BT lowerings during cruise 38 of the Gilbert were made every 6 hours enroute from Honolulu to the first longline fishing station at latitude 5°N., longitude 150°W. Three lowerings were made at each of the seven fishing stations; one immediately after setting, the second just prior to retrieving, and the third immediately after retrieving the longline gear. One BT lowering was made mid-way between fishing stations along 150°W. longitude (fig. 1). Aside from the foregoing deviations, BT lowerings were made following the schedule listed above.

The BT schedule followed during cruise 45 of the Smith differed only in that lowerings were made every 6 hours to latitude 4°N. on the run south from Honolulu.

Nine hundred-foot BT's were used on all the cruises. Observations made in conjunction with BT lowerings were coded according to H. O. Pub. 606-c, and recorded on Oceanographic Log Sheet B. These observations are presented in tables 2, 3, 4, and 5. The observations made during that portion of Smith cruise 45 concerned with the Undercurrent are not included here.

BT lowerings totalled 295 during Gilbert cruise 35, 263 during Smith cruise 43, 336 during Gilbert cruise 38, and 264 during Smith cruise 45.

Determinations from analyses of surface salinity and surface inorganic phosphate samples taken at BT lowerings are included in tables 2, 3, 4, and 5. Surface salinity values plus surface temperatures for locations other than BT lowerings are presented

in table 10. Both the surface salinity and surface inorganic phosphate samples were returned ashore for analysis with the exception that some phosphate samples were analyzed aboard the vessel during Smith cruise 45. The phosphate samples were frozen as a means of preservation.

During the four cruises, standard weather observations were made up to 4 times daily. They were omitted when the vessels were in bays or harbors, and were made sporadically during fishing periods. The observations, as encoded according to U. S. Weather Bureau Form 1210-F, are presented in tables 6, 7, 8, and 9. Weather observations made during the Undercurrent survey portion of the Smith are not included in table 9, and will be presented elsewhere.

Productivity observations

Water color and transparency observations were made routinely at local noon daily, during survey periods in the Marquesas area. The transparency measurements were made by lowering a 30-cm. Secchi disc. The water color observations were made by comparison with the Forel standard. In addition, photometer readings were made during Smith cruise 45 at the diurnal variability station (9°34'S., 139°50'W) and between 5°S. and 10°N. on the run between the Marquesas and Honolulu. These and related data are presented in tables 11, 12, 13, and 14.

Three types of plankton hauls were made during the four cruises with a 1-meter net of 656 Nitex (aperture width 0.66 mm.), similar to that which has been described by King and Demond (1953). The purpose of these hauls was to obtain a measure of the standing crop of zooplankton, and to determine the distribution and abundance of tuna larvae. On all the four crulses, a 30-minute oblique tow to a depth of 140 meters was made each night during the runs to and from the Marquesas. During the offshore surveys in the Marquesas, two 0-140 meter tows were made nightly. During the offshore survey conducted during Gilbert cruise 35, these nightly tows were paired half -hour tows.

Upon completion of the inshore surveys conducted during all four cruises, a 24-hour plankton station was occupied at latitude 9°34'S., longitude 139°50'W. The purpose of this station was to obtain data on the diurnal variability of zooplankton and tuna larvae. Two of these stations were occupied during Gilbert cruise 35, and paired 0-140 meter half-hour tows were made every 3 hours. One station was occupied during Smith cruise 43, and a single 0-140 meter half-hour tow was made every 2 hours. Two stations were occupied during Gilbert cruise 38, and single 0-140 meter half-hour tows were made every 2 hours. At the one station occupied during Smith cruise 45, 2-net tows were made, a 1-meter open net towing in the depth range 0-140 meters and a 1-meter closing net in the depth range 140-280 meters. The latter type of net has been described by King et al. (1957). These half-hour 2-net tows were made every 2 hours.

Seven half-hour 0-140 meter hauls were made at night between the Marquesas and Tahiti, during Gilbert cruise 35. The station data and plankton volumes for hauls made during the four cruises are presented in tables 15, 16, 17, and 18.

Surface trolling

Except when otherwise engaged, the vessels did surface trolling during daylight hours with varying numbers of lines. The catches and related data for the four cruises are presented in tables 20, 21, 22, and 23. The common and scientific names of fish caught are listed in table 19.

Longline fishing

During Gilbert cruise 38 a series of seven longline fishing stations was occupied along longitude 150°W. between latitude 5°N. and 1°S. (fig. 1). At each station, 44 baskets of 11-hook longline gear were set. The gear used was of POFI design, as described by Mann (1955). Pacific herring (Clupea pallasii) was used as bait. The longline station data and catch per 100 hooks are presented in table 24; the catch record and sizes of fish in table 25.

Live-bait fishing

During the course of the inshore and offshore surveys in the Marquesas and in the Tuamotus, fishing trials with live-bait were made on tuna schools encountered. The purpose of these fishing trials was to determine the species and size of tuna in the school, to obtain material for biological studies, to continue the tagging of tunas, and to make observations of biting behavior. The live - bait fishing techniques used were similar to those of the Hawaiian skipjack fishery, as described by June (1951). The Marquesan sardine was used as bait. The station data, catches, and amount of bait used in tuna school fishing trials during the four cruises are presented in tables 26, 27, 28, and 29. The length frequency by sex of samples of yellowfin and skipjack caught during these fishing trials are given in tables 30 through 34, inclusive.

Baitfish surveys

Two procedures were used for conducting baitfish surveys in the Marquesas; daylight visual scouting and night-light fishing. Scouting during the day was done by three or four swimmers, equipped with faceplates, making a visual sweep of the shallow water in the bays, and noting the schools of bait-sized fish. The procedure and equipment used for capturing bait during the day has been described by June Night-light fishing was done with the vessels anchored in about 40-foot depth of water. Marquesan sardines of all sizes were found to be attracted to the diffused light from a floodlight, and the fish were caught alongside the vessel by using a night net of specialized design. The results of visual scouting, day and nightlight fishing for the four cruises are given in tables 35 through 38, inclusive. The length frequency by sex of Marquesan sardine samples is presented in tables 39 through 42, inclusive.

Birds, tuna schools, and aquatic mammals

During daylight hours on all four cruises, a watch was maintained for birds, tuna schools, and aquatic mammals. Summaries of these observations are presented in tables 43 through 47 inclusive.

Field party personnel

<u>Charles H. Gilbert</u> - William T. Tanaka, Master

Cruise 35

Robert C. Wilson, Field Party Chief Eugene L. Nakamura, Fishery Research Biologist

Cruise 38

Tamio Otsu, Field Party Chief Howard O. Yoshida, Fishery Research Biologist

Hugh M. Smith - Barnes Collinson, Master

Cruise 43

Donald W. Strasburg, Field Party Chief Richard N. Uchida, Fishery Research Biologist

Cruise 45

Joseph E. King, Field Party Chlef Murice O. Rinkel, Oceanographer Richard J. Hansen, Fishery Aid. John W. Van Landingham, Physical Science Aid

Takuji Fujimura, Collaborator, Hawaii Division of Fish and Game Stanley I. Shima, Collaborator, Hawaii Division of Fish and Game

LABORATORY PROCEDURES

Salinity and Phosphate determinations

The salinity samples were analyzed by a modification of the method of Knudsen (Van Landingham 1957). The inorganic phosphate samples were analyzed by the hydrazine sulphate modification of Denige's method (King et al. 1957).

Zooplankton

Details of the method for determining displacement volumes of zooplankton are described by King and Hida (1957).

Personnel processing samples and data (In addition to the authors)

John W. Van Landingham, Physical Science
Aid

Thomas M. Okano, Physical Science Aid Mary Lynne M. Godfrey, Physical Science Aid

Betty Ann L. Keala, Statistical Clerk

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Table 2. --Observations at bathythermograph lowerings, Charles H. Gilbert cruise 35 (coded according to H. O. Pub. 606-c, second edition, 1956)

					3	WInd	bel	Air temp.		R. r. r.o.		Clouds	ири	Á:;		Swell	_	J. i. S	Surf
Ser.	Time.	Date, 1957	Latitude	Longitude	temp.,	Dir.,	Force, kt.	Dry bulb,	1 .	meter, mb.	Wea-	Туре	Cover	[idiai]	552	Dir.	Amt.		РО4-Р, ив аt./L.
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٠ :	0000	10/4	18-55'N	155°52°W	2.08	077	2 ;		77.0	7101	03	ے د	~ :	2	ς :	007	٠, ،	1	t
7	0090	10/4	18-10'N	M.82.561	7.61	080	13		0.67	6701	00	Ð	5	9	5	100	7	3	ı
2	1200	10/4	17°26'N	155.04'W	78.0	080	14		73,8	1012	00	×	×	æ	3	060	-	ı	ı
4	1800	10/4	16°41'N	154-37'W	79.4	080	15		73.8	1013	00	8	33	6	3	060	-	ı	ı
5	0000	10/5	15°57'N	154°03°W	80.0	070	10	80.5	75.0	1011	70	9	4	6	3	060	-	ı	ŧ
9	0090	10/5	15°10'N	153°27'W	79.7	090	13		75.0	1012	20	9,8	3	9	3	060	_	ı	ı
7	1200	10/5	14"26'N	153°03'W	XXX	080	15	81.0	75.0	1010	0.5	8,6	3	6	33	060	_	1	1
#	1800	10/5	13°41'N	152-40'W	81.1	080	14		0.92	1012	0.3	9,8	æ	35	3	100	-	1	ı
6	0000	9/01	12.57'N	152°15'W	11.21	050	0.4	81.6	77.0	1010	0.3	9,8	80	30	3	100	_	ı	1
10	0090	9/01	12.12'N	151°48'W	82.2	080	90	81.0	0.92	1012	91	9,8	æ	9	7	100	~	å	1
Ξ	1200	9/01	N.92.11	151-21'W	81.5	100	10		0.92	1011	16	В, 6	В	9	7	100	~	1	ı
71	1500	10/6	11.03'N	151-06'W	61.0	040	60	81.5	74.5	1011	91	9,8	8	9	7	100	_	1	1
13	1800	10/6	10.39'N	150.52'W	82.1	060	60	83.0	77.0	1012	14	9,8	8	9	7	060	_	ı	1
14	2100	9/01	10.16'N	150°38'W	82.4	100	0.4	83.2	77.0	1013	20	В, 6	æ	7	7	060	7	1	ž
15	0000	10/7	09°53'N	150 - 25 W	62.1	060	2.0	81.6	76.1	1010	20	9,8	8	7.	~	100	_	ı	t
91	0300	10/7	09*31'N	150*11'W	61.9	120	12		0.77	1010	12	9,8	83	9	7	071	7	8	1
1.5	0090	10/7	N'80"60	149°57'W	82.2	060	14	80.3	0.97	1012	70	8 , 9	€	2.	7	060	_	ı	1
1.0	0060	10/7	N. 1. 1. 10	149 - 44' W	84.7	000	00	80.3	75.3	1012	7.0	8 . 9	=	=	7	060	_	1	ι
19	1200	10/1	08.25'N	149°30'W	81.6	140	0.1		75.5	1010	70	8,6	æ	7	7	0.60	_	1	ı
20	1500	1./01	N, E0. HO	149°16'W	82.6	150	60	9.28	77.1	1010	(0.1	9,8	9	7	7	100	7	1	8
2.1	1800	10/7	N.14.10	149.62'W	83.0	150	13	84.0	77.2	1010	20	8,6	5	=======================================	7	120	7	1	1
22	7100	10/1	N161.20	148°48'W	113.9	150	13		77.0	1012	0.1	9	æ	6	3	150	~	4	1
23	0000	10/8	N.89.90	148°35'W	83.8	170	12		77,3	1009	70	æ	25	6	3	150	-	ı	ı
24	0300	10/8	N168-90	N.22-81	84.0	100	1.1	83.0	78.0	1010	70	æ	9	6	3	03/3	_	1	1
57	No al	Ide - B	No slide - BT damaged,																
97	0060	10/8	N.00.90	147°57'W	82.0	120	14		76.0	1012	70	55	Z	6	7	120	-	1	t
2.2	1700	10/8	05*40'N	147-44'W	81,8	110	2		75.3	1010	0.1	3 0	7	1.	33	130	_	1	1
28	1500	10/8	05"ZI'N	147°31'W	81.0	170	60		75.4	1010	70	8,6	6.4	-	رس	140	-	1	1
62	1800	10/8	N,10.50	147-18'W	81.0	130	14		76.0	1013	20	18,4	33	5	33	130	_	35.07	0.28
30	2100	10/8	04.41.N	147.06'W	61.9	140	13	83.0	5.97	1012	0.3	H, 4	ಬ	6	7	130	-	1	ı
3.1	0000	10/9	N.02.F0	146-54'W	81.8	150	1.1		74.8	1009	20	8,4	4	5	33	130	1	35.07	0.36
37	0300	10/9	N165-E0	146-45'W	H1.3	140	1.1		74.5	1010	0.1	8	7	6	3	1.50	-	ě	ı
33	0090	10/9	03*38'N	146 - 34 W	81.2	130	10		74.0	1012	20	В	-	6	7	120	_	35,06	15.0
34	0060	6/01	03°17'N	146°22'W	80.8	140	14		75.0	1017	70	8	3	6	7	130	-	1	1
35	1200	10/9	N.55.70	146*12'W	80.4	150	11	80.0	74.0	1010	70	8,4	EÜ	7	-7	150	7	34.98	0.37
			the state of the s																

Table 2. --Observations at bathythermograph lowerings, Charles H. Gilbert cruise 35 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

	- 1																																			
Surf.	РО4-Р, µg at./L.	ı	0.31	,	0.34	1	0.41	1	0.34	ı	0.52	ı	0.36	1	0.38	ı	0.36	ı	0.45	,	0.38	1	0.36	1	0.27	1	0.38	4	0.36	1	0.32	ı	0.78	0.30	0.45	0.28
Surf.	8al.,		35.04	ı	35.20	ı	35.30	,	35.34	ı	35,30	1	35,35	t	35.40	ı	35,43		35,46	ı	35,51	ŧ	35.52	ı	35.52	ı	35,58	ı	ı	ı	35,67	ı	35.64	35.51	35,58	35.71
п	Amt.	1	1	7	٦	-	-	1	1	7	٦	_	1	1	П	1	1	1	-	7	-	-	-	-	-	П	-	-	-	-	_	П	-	7	-	-
Swell	Dir.	150	150	150	140	140	140	130	140	140	140	130	130	130	120	130	130	130	120	120	120	120	120	120	120	120	110	110	110	110	110	060	020	080	060	060
М	Sea	7	2	7	2	2	2	7	2	2	7	7	7	7	7	2	7	7	3	3	7	7	2	2	7	7	2	7	7	7	7	7	7	7	7	7
Á211	IidiaiV	7	6	6	6	6	6	6	2	00	6	6	6	6	œ	00	2	œ	6	6	6	6	6	6	2	6	6	6	6	6	6	6	œ	6	6	∞
	Cover	2	1	2	00	3	1	2	3	9	4	2	٣	7	∞	00	7	٣	0	0	0	0	0	3	-	7	1	-	-	7	2	7	9	2	9	9
Clouds	Type	00	8	80	4.8	4,8	80	8,6	∞	4,8	80	8,6	80	00	9	8,4	∞	∞	×	×	×	×	×	8	80	80	80	8	8	8	80	89	8	89	80	8
	Wea- ther	0.2	0.2	0.2	03	0.1	0.2	0.2	02	03	0.2	0.2	0.2	16	03	0.2	02	01	01	01	0.2	02	0.2	03	0.1	03	0.1	0.2	0.2	02	0.5	0.5	0.1	15	14	15
Baro-	_	1011	1012	1012	1010	1010	1012	1012	1010	XXXX	1012	1011	1009	1010	1012	1012	1012	1012	1014	1012	1009	1010	1012	1012	1011	XXXX	1014	1013	1012	1012	1013	1014	1013	1012	1011	1012
mp.	Wet pulb,	74.8	0.97	75.5	75.1	75.1	75.0	75.5		75.0	76.3	9	75.0	75.5		75.1		75.0	75.3	74.8	5.		75.3	4.	73.0		74.3	74.5	74.7	75.0	75.5	75.3	75.3		0.77	
Air temp.	Dry bulb,	78.8	81.0	81.2	80.8	80.8	81.0	80.3	79.3	79.2	81.0	81.0	80.0	80.3	81.2	80.2	7.62	9.62	81.2	81.6	9.08	80.9	81.0	81.0	80.0	6.62	81.2	81.8	81.2	81.1	82.5	81.2	82.2	81.7	82.0	82.5
p	Force, kt.	15	60	60	60	11	10	10	10	08	11	13	60	10	13	11	13	12	15	12	12	60	11	10	20	60	60	90	60	11	14	12	15	10	12	60
Wind	Dir., °T.	150	150	150	150	120	120	120	110	140	130	100	120	100	110	130	110	120	110	130	120	120	100	110	110	080	110	110	100	080	060	080	020	080	060	080
Bkt.	temp.,	79.4	9.08	80.1	80.1	80.1	79.7	79.7	79.1	78.8	79.7	80.0	80.0	80.1	6.62	80.1	79.3	- 4	6.62	80.3	80.4	80.8	80.3	80.8	80.5	80.9	81.0	82.3	82.0	81.4	81.7	80.9	82.2	81.7	81.8	
	Longitude	146°00'W	145°49'W	145°38'W	145°24'W	145°08'W	144°52'W	144°37'W	144°23'W	144°11'W	143°58'W	143°46'W	143°36'W	143°28'W	143°20'W	143.13'W	143°05'W	142°57'W	142°48'W	142°38'W	142°30'W	142°20'W	142°10'W	141°58°W	141°45'W	141°32°W	141°21'W	141.09'W		140°46'W			140.32'W	140.02'W	139°20'W	138°52'W
	Latitude	02°34'N	02.12'N	01.51'N	01°29'N	01°07'N	00°46'N	00°24'N	00°02'N	00.2115	00°44'S	01.06'S	01°31'S	01°57'S	02°21'S	02 * 45 'S	03.10'S	03*3315	03.59'S	04°24'S	04°48'S	05°13'S	05°34'S	05°54'S	06 * 14 °S	06°33'S	96.55	07.16'S	07°37'S	S165.20	08.1815	08 • 38 ¹ S	08 - 23 5	07 • 47 tS	08.4015	09°32'S
	Date, 1957	10/9	10/9	10/9	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/11	10/11	10/11	10/11	10/11	10/11	10/11	10/11	10/12	10/12	10/12	10/12	10/12	10/12	10/12	10/12	10/13	10/13	10/13	10/13	10/14	10/15	10/16	10/17
	Time, GCT	1500	1800	2100	0000	0300	0090	0060	1200	1500	1800	2100	0000	0300	0090	0060	1200	1500	1800	2100	0000	0300	0090	0060	1200	1500	1800	2100	0000	0300	0090	0060	2145	2100	2100	2100
	No.	36	37	38	39	40	41	42	43	44	45	46	47	48	49	20	51	52	53	54	55	99	57	58	59	09	61	62	63	64	65	99	29	89	69	20

Table 2. --Observations at bathythermograph lowerings, Charles H. Gilbert cruise 35 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

	_																																						
,	Surf.	РО4-Р, µg at./L.	1	0.36	ſ	0.33	0.31	ı	1	1	ı	ı	ı	ı	ı			0.44	0.31	0.45	0.35	0.38		0,42	0.41	0.43	0.42	0.36	0.44		0,37	0.36	0.45	0.42	0.36	0.51	0.36	0.36	
,		sal.,	ı	35.60	ı	35.73	vo.	ι	ı	1	ı	ı	ı	ı	ı	35.72	35.71	35.66	35.59	35.73	35.72	35.61		S	5.5	35,59	υ. υ			υ, υ	υ, Σ	35.52	ഹ	5.6	5.6	5.6	35.66	5.6	
		Amt.	н	3	3	3	_	1	-	٦	г	-	7	-	-	-	1	-	-	~	_	-		7	_	_		-	_	_	-	-	-	1	1	1	7	1	
Swell	-	Dir.	120	120	120	120	120	100	100	060	060	100	100	100	100	060	060	060	060	060	060	060		060	060	060	060	060	060	060	060	060	060	060	060	060	060	060	
-		Sea H •							3		3	2	2	2	7	3	3	3	c	2	2	2		7	2	7	7	2	2	7	7	7	_	-	٦	7	7	7	
100	_		ļ								6		6	6	6	6	6	6	6	S	2	ı,)	2	6	6	6	6	2	S	Ŋ	2	6	6	6	6	2	9	
\^1	11	idisiV																																					
id s		Cover	∞	7	80	80	2	9	9	00	9	2	×	×	×	Ŋ	4	5	Ŋ	3	4	2	1	3	_ν	7	2	4	2	2	Z	2	7	∞	80	4	3	· ν	
Clouds	3	Туре	8	80		8,5	00	8	80	80	80	œ	×	×	×	∞	œ	8	80	8	80	α	o	00	80	89	8,4	00	00	80	80	8	80	00	00) 00	00	0 00	
	117	wea- ther	14,	02	02	02	01	03	02	03	15	01	00	00	00	02	02	02	01	02	02	0	5	02	02	0.1	0 1	03	02	02	03	16	02	03	02	0.0	0.2	25	
	Baro-	meter, mb.	1015	01	1014	1012	1013	1014	1014	1012	1012	1014	1015	1014	1014	1014	1012	1012	1012	1015	1014	1007		1014	1016	1014	1012	1012	1015	1014	1012	1014	1015	1015	1012	1012	1014	1014	
6	.]	Wet r	76.5	74.8	74.4	74.4	75.0	75.0	73.5	74.9	74.9	73.6	74.0			,	9	76.3	9		ı ıc	7 10	n	75.0	4.	74.5	74.5	74.0	74.7	73.0	73.9	3	75.0	76.0	76.0	7.7.0	74 1	75.5	
V 4 2 4 0	Air temp	Dry bulb, b				_	_						81.3		80.8	82.2	23.	82.2	82.0	81.2	2 0	0 0		0	_;	81.3	2.	Ξ.	i.	0	0		83.0		· (~	; -	: -	79.8	- 1
	D.	Force, kt.	2.0	18	16	.17	4] [1 [10	12	0.8	080	0.7	16	٠ ب	13	12	00	00	5 -	01	08	12	10	60	12	12	10	12	12	60	12		12	12	10	
170	Wind	Dir.,	120	100	110	110	120	100	000	070	210	130	090	110	100	060	000	060	000	070	040		060	060	060	060	060	060	060	060	090	060	060	060	080		200	080	
	Rkt	. :	81.6	2	82 D	82.1	2 7 7	a	0 0	0.70	81.5	80.4		2 2	•	80°7		81.7		0.00	2.0	100		80.1		81.3		Ξ.	80.6	0	80.4		81.3					81.2	
		Longitude	120 • EOIW	130 24 W	130°061W	139 00 W	120°561W	120°E21W	130 E21W	130°51 W	139°481W	139*50'W	130.511W	130.51 W	130°50'W	130°32'W	1200111W	138°50'W	120 00 W	138°06'W	0000	101 40.W	137*24'W	137°08'W	136°44¹W	136°22'W	136.02'W	135°40'W		136°17'W	136°30'W	136°48¹W	16	137°371W	7 6	138-02-W	7 1	138°58°W	,
		Latitude	0000	20.01	10.12.5	2,91,01	5.65-60	205.60	09-33-3	09°35'5	09.3216	09.341S	0003415	00 22 10	0.75 60			09-00		5,60-60				8122.60		09*1815							09.14'S	00 • 1 210				09*18'S	- 1
		Date. 1957	00,700	10/18	10/18	10/19	10/19	10/50	17/01	10/21	10/01	10/22	10/33	10/22	10/22	10/24	10/24	10/25	10/01	20/01	10/22	c7/01	10/25	10/25	10/25	10/25	10/26	10/26	10/26	10/26	10/26	10/26	10/26	10/01	07/01	10/27	10/27	10/27	104
		Time, GCT		1725	0117	1745	2110	2115	1630	1930	2230	0430	0	0000	1030	1550	1800	2100	0000	0300	0000	0060	1315	1500	1800	2100	0000	0300	0000		1215	1500	1820	0	0017	0000	0300	0090	2700
		Ser. No.		71	72	73	74	75	92	22	78	80		100	78	80 0	4, 1	82	90	87	88	89	06	0 1	7.7	76	0.4	4 0	90	0,0	- 00	0 0	100		101	102	103	104	7

Table 2. --Observations at bathythermograph lowerings, Charles H. Gilbert cruise 35 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Surf.	PO4-Р, µg at./L				0.38		.2	0.38	.3	0.29	0.48		. 3		. 2	. 2	0.38						0.37		0.32	0.40	0.48	0.50					0.44	0.49	0.54	09.0
Surf.		10	10	10	36.46	35.78	10	5	5	35.83	5	5	'n.	9	36.14	6.1	36.08	9	5	5	5.		35.78	5.		υ,	5.6	5.5	5.5	5.5	5.5	5.5	5.5	35.57	5.5	5.5
	Amt.	-	_	_	_	_	-	_	_	_	_	_	_	-	-	~	1	_	-	Н	_	_	-	-	-	-	_	-	_	-	-	_	-	1	_	-
Swell	Dir.	060	060	080	080	060	060	060	060	060	060	060	060	060	060	060	060	060	060	100	060	060	060	060	060	060	080	080	080	080	080	080	080	080	080	080
	Sea		٥1	3	3		2	3	3	3	3	₩	₹#1	₩.	-1 1	3	~	~	3	3	3	3	3	2	~	2	3	ぜ	ਚਾ	₹	₩	3	3	3	3	3
Lity	lidiaiV				6					52													00											00		
00;	Cover	×	9	2	œ	5	īΩ	4	4	9	9	2	ıΩ	ıΩ	4	41	4	2	2	2	œ	6	7	7	2	7	3	Ŋ	2	ιÜ	4	9	41	3	īΩ	5
Cloud	Type	×	8	- 10	8,6		4,8	8	80	8	80	00	00	8	8	89	∞	∞	00	80	-	9,8	8,6	00	00	œ	00	8,6	9	∞	∞	∞	80	8,1	∞	8
	Wea- ther	00	15	03	0.2	0.2	03	0.2	25	2.5	15	0.1	0.5	0.2	0.2	0.2	0.2	02	15	15	0.2	0.5	0.2	02	01	05	0.2	03	03	0 1	0.5	03	02	02	0.5	0.2
Baro.	meter, mb.	1012	1014	1015	1013	1012	1013	1015	1014	1014	1014	1016	1014	1013	-	1015	1014	1014	1014	1015	1014	1012	1012	1013	1011	1011	1014	1012	1010	1010	1012	1011	1010	1011	1012	1014
-	Wet n	5.	4	5	75.0	9	70	9	9	74.9	5	6.	'n	δ.	74.8	'n	4,	70	74.8			4.	76.2	υ.		5.				5.		5.		74.5	5.	5.
Air te	Dry bulb,	Ξ.	o.		82.5	2	2.	i.		78.2	-		÷			Ξ.	-	0	0		0	Ξ.	81.5	ä	i	0	3.	82.3	2,	80.6	80.7	0	0	80.0	0	-
q	Force, kt.	10	13	15	15	91	13	15	15	0.5	19	16	17	15	19	14	18	18	14	14	17	18	15	17	17	17	20	16	16	15	16	15	16	16	18	18
Wind	oT.	060	020	020	080	060	060	060	100	060	060	020	060	060	080	080	080	080	080	120	070	070	080	080	080	080	080	080	080	060	080	100	100	100	080	100
Bkt.	·F.	Ξ.	Ξ.	-:	82.0	2	-	$\vec{-}$	81.8	2.	i.	81.8	2.	÷	0		Η.	~ i	i	2.	2,	i.	81.3	÷	÷.	81.4			81.3				79.7	80.1	80.0	80.8
	Longitude	139°12'W	139°37'W	139°37'W	139°34'W	139°34'W	139°34'W	139°34'W	139°30'W	139°23'W	139°25'W	139°28'W	139°32'W	139°34'W	139°36'W	139°36'W	139°32'W	139°26'W	139°26'W	139°26'W	139°25'W	139°29'W	139°35'W	139°40'W	139°40'W	139°40'W	139°37'W	139°36'W					-	139°28'W	321	139°39'W
	Latitude	09.5018	09°18'S	09°38'S	8,05.60	10°10'S	10°34'S	10.49'S	11.05'S	11°23'S	11°39'S	12.00'S	12.20'S	12°39'S	12°56'S	12°36'S	12°24'S	12,10'S	11°58'S	11°38'S	11°20'S	11°00'S	10°38'S	10°14'S	5,98,60	09°12'S	S.95.80	08°28'S	08.0645	07°47'S	07°28'S	07°2015	07°08'S	06°54'S	06°33'S	06°12¹S
	Date, 1957	10/27	10/27	10/27	10/27	10/28	10/28	10/28	10/28	10/28	10/28	10/28	10/28	10/29	10/29	10/29	10/29	10/29	10/29	10/29	10/29	10/30	10/30	10/30	10/30	10/30	11/1	11/1	11/2	11/2	11/2	11/2	11/2	11/2	11/2	11/2
E	Time, GCT	1300	1500	1800	2100	0000	0300	0090	0060					0000		0090	0060	1300	1500	1800	2100	0000				1500	1815	2100	0000	0300						2100
7	No.	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140

Table 2. --Observations at bathythermograph lowerings, Charles H. Gilbert cruise 35 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont¹d)

																																				- 1
Surf.	РО4-Р, µg at. / L.	0.49	0.46	0.51	0.49	0.62	0.43	0.44	0.45	1	0.45	0.52	0.41	0.41	0.36	0.42	0.34	0.42	ı	0.36	0.36	0.34	0.31	0.34	0.30		0.39		0.39	0.38	0.38	0.34	0.38	0.39	- 1	0.44
Surf.		35.57	35.55	35.55	35,57	35.57	35.57	35.57		1	35.55	5.5	35.59	9.	35.66		35.66	35.64	ı	35.61	N.			35,73		35.68		. 7	. 7	35,73	5.7	10	2.	5.7	- 1	35.62
1	Amt.	1	_	Н	-	_	Н	П	7	_	н	н	_	_	_	г	Н	Н	~	_	н	H	7	_	-	-	П	3	_	7	-	H	_	7	7	7
Swell	Dir. A	080	080	080	080	080	080	080	060	060	060	100	100	100	100	060	060	060	060	060	060	060	060	060	060	060	060	120	060	060	060	060	060	060	060	060
	Sea	3	e	3	3	3	3	2	3	7	3	3	~	2	7	2	2	2	7	7	2	2	7	7	7	7	7	7	7	2	2	3	3	\sim	~	2
lity	(idieiV	6	6	9	9	9	00	6	00	00	00	2	2	9	00	6	6	6	6	6	2	2	2	6	6	6	6	6	œ	œ	00	00	00	œ	00	∞
ds	Cover	3	2	4	3	2	2	3	00	2	00	2	2	2	n	3	3	1	-	1	2	2	4	3	1	2	4	4	n	3	3	41	1	7	-	-
Clouds	Type	8,4	00	∞	5,8	80	00	9	9,8	00	9,8	00	∞	∞	00	00	00	00	00	00	∞	∞	00	80	∞	∞	9	00	00	00	00	8,4	00	00	00	8
	Wea-	0.2	0.5	02	0.1	0.1	02	0.1	03	02	14	0.1	02	02	02	02	02	0.1	0.1	0.2	02	02	03	0.2	01	02	0.2	02	0.2	02	02	03	01	0.1	02	02
Baro-	meter, mb.	1008	1008	1010	1010	1009	1010	1012	1011	1010	1010	1012	1011	1011	1012	1014	1012	1008	1009	1010	1011	1011	1010	1011	1012	1011	1009	1009	1011	1010	1010	1010	1014	1012	1010	1009
	Wet m	75.0	75.0	74.8	75.0	74.7	74.9	76.2	76.5	76.2	76.5	75.1	75.7	74.0	74.9	75.0	75.0	75.0	0.97	75.0	0.92	74.8	75.0	74.8	76.2	5	0.97	76.5	0.97	75.1	.75.0	75.3	75.0	74.8	74.0	74.2
Air temp.	Dry bulb,	80.8		80.3	80.1		79.9	82.0	80.0	81.2	2	81.5	81.0	80.5	81.0	84.0	84.0	84.0	82.0	H	81.3	80.1	81.3	ij	85.0	ů.	5.	83.5		2.		81.7	82.5	82.7	82.5	83.8
d	Force, kt.	12	15	15	15	10	10	14	12	12	90	17	13	60	12	14	12	10	12	13	15	13	15	15	15	14	60	12	14	12	12	14	18	13	16	60
Wind	Dir.,	080	060	100	100	110	110	080	110	020	060	100	110	060	110	060	060	060	060	100	110	060	060	060	060	060	060	060	110	100	060	060	080	080	080	080
Bkt.	temp.,	80.9	80.2	7.62	6.62	6.62	80.0	80.8	80.8	81.0	80.5	80.9	81.0	81.3	81.0	81.8	82.2	82.0	82.0	81.7	82.0	81.4	80.3	82.1	82.5	83.2	83.1	82.5	82.0	82.0	82.0	82.0	81.6	81.2	82.2	81.4
	Longitude	139°40'W	139°40'W	139°46'W	139°49'W		139°51'W	139°56'W	139°51'W	139°52°W	139°36¹W	139°31'W	139°28'W	139°41'W	139°39'W	140°00'W	140°19'W	140°36'W	140°43'W	141°00'W	141°20'W	141°40'W	142°02'W	142°19'W	142°42'W	143°06'W	143°23'W	143°18'W	143°00'W	142°42'W	142°19'W	142°06'W	141°47'W	141°29'W	141°22°W	141°16'W
	Latitude	05°52'S	05°31'S	05.4815	06.0415	06°27'S	06°41¹S	07.01'S	07°17'S	07°32'S	08.0018	08.2218	08*3815	08°56'S	8,01.60	09.12'S	09°13'S	09°13'S	09.13'S	09°14'S	09°14'S	09.13'S	09°15'S	09°14'S	09°13'S	09.1215	09.11'S	09.1215	09°14'S	09°1845	09°18'S	09°18'S	S.91.60	09.16'S	S191.60	09°16'S
	Date, 1957	11/3	11/3	11/3	11/3	11/3	11/3	11/3	11/3	11/3	11/4	11/4	11/4	11/4	11/4	11/4	11/4	11/5	11/5	11/5	11/5	11/5	11/5	11/5	11/5	11/5	9/11	11/6	11/6	11/6	11/6	11/6	11/6	11/6	9/11	11/7
	Time, GCT	0000	0300	0090	0060	1300	1500	1850	2100	2330	0300	0090	0060	1300	1500	1800	2100	0000	0215	0300	0090	0060	1300	1500	1800	2100	0000	0300	0090	0060	1300	1500	1800	2100	2245	0000
	Ser. No.	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175

Table 2, --Observations at bathythermograph lowerings, Charles II. Gilbert cruine 15 (coded according to II. O. Pub. 666-c., second edition, 1956) (cont.4)

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$							Whiel	-	Air temp.				Clouda	ichn	Á	_	Swell			
GGCT 1956 LAMINGE Lampfindic Campfindic Campf	2					Bkt.					Karo	West		1	H				Surf.	
0.000 11/7 09°178′S 1-0°24′W 61.5 0.90 11 62.0 74.8 1009 0.2 6 7 8 0.90 2 1.001 11/7 09°178′S 1-0°24′W 61.5 0.90 12 61.2 74.1 1011 0.2 6.5 2 7 8 0.90 2 1.001 11/8 09°178′S 1-0°24′W 61.5 0.90 12 61.2 74.1 1011 0.2 6.5 2 7 8 0.90 2 1.001 11/8 09°178′S 1-0°24′W 61.9 10.9 12 61.2 74.2 1010 0.2 6 8 5 2 7 8 0.90 2 1.001 11/8 09°178′S 1-0°24′W 61.9 10.9 11/1 10.1 10.1 10.0 10.2 8 5 2 7 8 0.90 2 1.001 11/8 09°178′S 1-0°24′W 61.9 10.0 11/1 10.1 10.0 10.2 8 5 2 7 8 0.90 2 1.001 11/9 10°24′S 1-0°24′W 61.4 10.0 16 61.2 75.2 1010 0.2 8 5 2 7 8 0.90 2 1.001 11/9 10°24′S 1-0°24′W 61.2 10.0 16 61.2 75.2 1010 0.2 8 5 2 7 8 100 2 1.001 11/9 11°24′S 1-0°24′W 61.2 10.0 16 61.2 10.0 10.2 0.2 8 5 2 7 8 10 0 1.001 11/9 11°24′S 1-0°24′M 61.2 10.0 16 61.2 10.0 10.2 0.2 8 5 2 7 8 10 0 1.001 11/9 11°24′S 1-0°24′M 61.2 10.0 16 61.2 10.0 10.2 0.2 8 5 2 7 8 10 0 1.001 11/9 11°24′S 1-0°24′M 61.2 10.0 16 61.2 10.0 10.2 0.2 8 5 2 7 1 10 0 1.001 11/9 11°24′S 1-0°24′M 61.2 10.0 16 61.2 10.0 10.2 0.2 8 5 2 1 10 0 1.001 11/9 11°24′S 1-0°24′M 61.2 10.0 16 11 10.0 10 10 10 10 10 10 10 10 10 10 10 10 10	ž			Latitude	Longitude	emp. t		Porce, kt.	balls,	_	meter.	Ber	Type	Cover			DIF.	m(.	n.11. ,	РО4-Р. рк «С./С.
0000 11/7 09°19'8 140°29'4	176		11/7	0.9" 1845	I-11 "00" W	80.8	060	Ξ			1009	70	88		æ	- 27	. 060	~	35,61	0.45
1900 11/7 09°1778 140°297W 80.9 10.1 14 80.8 74.0 10.10 0.2 8.5 7 8 909 2 1900	111		11/1	09" 1845	140 "44'W	81.5	060	177	81.4			20	11, 13	6.79	7.		060	~	34, 6.2	0.46
1300 1/7 09°10'S 140°22'W 81.5 120 16 16 17 17 17 17 17 17	178		11/7	09"17'8	N-67.0FI	80.9	060	2	11 1.3			70	H, 5	m 7	1.	~	060		15.64	0, 35
1500 11/8 09°10'S 140°21'W 81.5 120 16 81.2 75.2 1010 02 8 5 9 3 110 2 1 1 1 1 1 1 1 1 1	179		11/7	8,91,60	1-10 " 08 tW	но. н	110	7-1	HO. H		_	10	==	4,	7	~	060	~;	19,68	0.46
1400 11/9 10°0.265 140°41'W 81.7 110 16 83.0 76.5 1010 02.8 5 9 5 110 2 2 150 2 150 150 170 11°.265 11°.25'W 81.4 110 16 83.0 76.5 1010 02.8 8 2 9 2 130 2 150 150 170 11°.265 11°.25'W 81.4 110 16 83.0 76.5 1010 02.8 8 2 7 2 130 2 150 150 170 11°.205 14°.21'W 81.7 070 011 84.9 77.2 101.2 8 8 7 2 130 2	180		11/8	8,01,60	M.27.0FI	81.5	170	91	81.2			70	8		\approx	-:	060	~ ;	ě.	ı
0000 11/9 10°0-46°S 141°50°W 81.4 110 16 82.8 7°5, 1000 02 8 6 7 2 140 2 150 100 11/9 10°0-46°S 141°50°W 81.4 110 16 83.0 7°5, 1000 02 8 6 7 2 140 2 140 2 140 110 11 83.0 7°5, 1000 02 8 8 7 2 140 2 140 2 140 140 140 13°0.05 144°0.05 110 11 83.0 7°5, 1000 02 8 8 7 2 140 2 140 2 140 140 140 13°0.05 144°0.05 11 84.5 7°5, 1000 00 17/10 13°0.05 146°0.09 81.4 7°5, 1000 00 17/10 13°0.05 146°0.09 81.4 7°5, 1000 00 17/10 13°0.05 146°0.09 81.4 7°5, 1000 00 17/10 14°0.05 140°0.09 81.4 7°5, 1000 00 17/10 14°0.05 140°0.09 81.4 7°5, 1000 00 17/10 14°0.05 140°0.09 81.4 7°5, 1000 00 17/10 14°0.05 140°0.09 81.4 7°0.00 00 17/10 14°0.05 140°0.09 81.4 7°0.00 00 17/10 14°0.05 140°0.09 81.4 7°0.00 00 17/10 14°0.05 140°0.09 81.4 7°0.00 00 17/10 14°0.05 140°0.09 81.4 7°0.00 00 17/10 14°0.05 140°0.09 81.4 7°0.00 00 17/10 14°0.05 140°0.09 81.4 7°0.00 00 17/10 14°0.05 140°0.09 81.4 7°0.00 00 17/10 14°0.05 140°0.09 81.4 7°0.00 00 17/10 14°0.05 140°0.09 81.4 7°0.00 00 17/10 14°0.05 140°0.09 81.4 7°0.00 00 17/10 14°0.05 140°0.09 81.4 7°0.00 00 17/10 14°0.05 140°0.09 81.4 7°0.00 00 17/10 14°0.05 140°0.09 81.4 7°0.00 00 17/10 14°0.05 140°0.09 81.4 7°0.00 00 17/10 14°0.05 140°0.09 81.4 7°0.00 00 17/10 14°0.05 140°0.09 81.4 140°0.00 11/10 14°0.05 140°0.09 81.4 140°0.00 11/10 14°0.05 140°0.00 00 11/10 14°0.05 140°0.00 11/10 14°0.00 11/10 14°0.00 11/10 14°0.00 11/10 14°	181		11/8	8,97.60	140 "41 W	81.7	110	16	83.0	76.	101	20	**	S	5	espen	110	~.3	15.70	0.49
1.00	18:		11/9	8,70.01	W'05"1FI	84.4	110	16	B.Z. H	7.15	1008	70	**	7		-2	150	-3	15.75	0. 11
12.00 11/9 11°248'S 143°24'W 84.0 110 118 81.5 75.5 101.0 0.2 8 5 9 2 190 2 180 118 11/9 11°248'S 143°41'W 84.2 0.00 11 84.8 7'2 101.0 0.0 X X 9 1 100 1 1 1 1 1 1 1	183		11/9	10.46'S	1-11"55'W	81,4	110	16	83.0		1010	70	**	^2	-	~ 7	1 30		15.79	0.26
1840 11/9 11/2045 144*201*W 84.5 0.000 11 84.8 77.2 0.012 0.2 8 5 9 2 1.90 2 0.000 11/10 12/205 144*281*W 84.3 0.000 11/10 13/205 144*281*W 84.3 0.000 0.0 84.8 75.0 0.010 0.2 8 2 7 7 1.000 1 18.0 1.1 1.0 1.2 9 1.0 1 1.0 1 1.0	184		11/9	11.28'S	142°24W	8.2.0	110	18	81.5			70	*	7.0		-3	140	A	35,77	0.30
0000 11/10 12*44'S 143*47W 85.7 070 11 84.8 77.0 1000 0 X X S 9 1 100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	185		11/9	12"08'S	143"01'W	84.6	080	1.1	8.3, 0			70	\approx	1,	0	- 2	1.50	~ *	15.81	0.30
12.00 11/10 13°5.29'S 144°219'W 81.3 070 079 84.8 76.0 0101 02 8 7 7 1000 1 12.00 1 12.50'S 144°519'S 145°50'W 81.3 0400 07 81.9 75.8 1010 02 8 7 7 1000 1 12.15 11/10 14°59'S 146°05'W 81.3 0400 07 81.1 76.1 1010 01 8 7 7 1 1000 1 12.15 11/10 14°59'S 146°05'W 81.3 0400 04 81.1 76.1 1010 02 8 6 7 7 1 000 1 12.15 11/10 14°55'S 146°05'W 83.4 140°05'N 83.4 77.0 1012 02 8 6 8 9 1 150 1 1000 1 1000 11/12 14°55'S 147°52'W 83.7 140°05'N 83.4 77.0 1010 02 8 6 8 9 1 150 1 1000 1 1000 11/13 14°55'S 147°52'W 83.0 150°15'N 83.5 76.2 1011 02 8 6 9 1 150 1 1000 1 1000 11/13 14°55'S 148°16'W 82.5 140°15'N 82.5 76.2 1011 02 8 6 9 1 150 1 1000 1 1000 11/13 14°55'S 148°16'W 82.0 120°15'N 82.5 76.2 1011 02 8 6 9 1 150 1 1000 1 1000 11/14 16°52'S 148°16'W 82.0 120°15'N 82.5 76.2 1011 02 8 6 9 1 150 1 1000 1 1000 11/14 16°52'S 148°16'W 82.0 120°15'N 82.5 76.2 1011 02 8 6 9 1 150 1 1000 1 1000 11/14 16°52'S 148°16'W 82.0 120°15'N 120°15'N 120°15'N 14°36'S 146°20'N 82.0 100°15'N 120°15'N 14°36'S 146°30'N 82.0 10°15'N 120°15'N 14°36'S 146°30'N 82.0 10°15'N 120°1	186		11/10	12"44'S	1430471W	H 3. 7	070	11	84.8			0.1	8,1	7.7	6	~.*	1.30	4.3	15.79	0.26
1200 1/10 13°51'S 145°01'W 8.2.3 080 07 81.9 75.8 1010 0.2 8 7 7 1 100 1 1800 1/10 14°21'S 145°52'W 8.2.8 040 0.0 8.2.2 76.0 1012 15 8 7 7 1 100 1 1800 1/11 14°39'S 146°12'W 8.3.4 140 07 8.4.4 77.0 1013 0.2 8.4 2 9 1 100 1 1800 1/11 14°39'S 146°12'W 8.3.0 130 13 8.3.5 75.0 1010 0.3 8 5 9 1 100 1 1800 1/12 14°52'S 147°52'W 8.3.0 150 13 8.3.5 75.0 1011 0.2 8.4 5 9 1 150 1 1800 1/12 14°52'S 147°52'W 8.3.0 150 14 8.2.5 75.2 1011 0.2 8.4 5 9 1 150 1 1800 1/12 14°52'S 148°02'W 8.3.0 150 14 150 1013 0.2 8.6 8.6 8 9 1 150 1 1800 1/13 15°01'S 148°02'W 8.2.5 140 14 8.2.5 75.2 1011 0.2 8 6 9 1 150 1 1 120 1 1 1 1 1 1 1 1 1	187		11/10	13.7048	144"28'W	8.6.7	070	60	84.8			00	×	×	6	_	100	_	15.79	0.48
1800 11/10 14°18/5 145°52*W 82.8 000 00 82.2 76.0 1012 15 8 7 7 1 090 1 1800 11/11 14°39/5 146°05*W 83.3 040 04 84.1 76.1 1010 01 8 6 9 1 090 1 1800 11/12 14°52/5 147°02*W 84.0 130 13 83.8 75.0 1010 03 84 6 9 1 100 0 1 1800 11/12 14°52/5 147°32*W 84.0 130 14 83.8 75.0 1011 02 84.6 3 9 1 100 1 1800 11/13 14°54/5 147°32*W 84.0 140 14 82.5 75.2 1011 02 84.6 3 9 1 150 1 1 1 1 1 1 1 1 1	188		11/10	13.5148	145°00'W	84.3	080	0.7	81.9			20	×	~	2	_	100		15.85	0.26
11/10 14°59'S 146°19'W 83.4 140 07 83.4 77.0 1012 02 8,4 2 9 1 090 1 000 0 0 0 0 0 0 0 0 0 0 0 0 0	189		11/10	14"183	145°52'W	87.8	000	0.0	H.2			1.5	*	7	7	_	060	_	10.01	0.30
1400 11/12 14°52'S 146°19'W 83.4 140 077 83.4 77.0 1012 02 8,4 2 9 1 100 0 0 11/12 14°52'S 147°02'W 84.0 130 13 83.5 75.0 1010 03 8 5 9 1 130 1 1 1 1 1 1 1 1 1	190		11/10	14.2938	N-50.9FI	83.5	0.10	I-0	84.1		1010	10	23	77	6	_	060			t
0000 11/12 14°55'S 148°02'W 83.7 040 14 83.8 77.0 1013 02 8,6 3 9 1 100 1 1800 11/13 15°01'S 147°57'W 83.0 150 15 82.8 76.2 1011 02 8 6 9 1 100 1 1800 11/13 15°01'S 147°38'W 84.0 150 11 82.5 76.2 1011 02 8 6 9 1 150 1 1800 11/13 15°13'S 148°02'W 82.0 150 11 82.5 76.2 1011 02 8 6 9 1 150 1 1800 11/13 15°13'S 148°01'W 82.0 150 11 82.5 76.2 1011 02 8 6 9 1 150 1 1800 11/14 15°13'S 148°01'W 82.0 120 12 82.0 74.0 1010 15 8 5 9 1 150 1 1800 11/14 15°13'S 148°41'W 80.5 110 14 80.0 72.5 1012 00 X X 9 1 110 1 10000 11/14 16°13'S 149°14'W 80.5 110 14 80.0 72.5 1012 00 X X 9 1 110 1 10000 11/14 16°13'S 149°14'W 81.1 040 08 81.4 77.0 1010 15 8 6 9 1 150 1 10000 11/14 16°13'S 149°24'W 81.1 040 08 81.1 76.5 1010 01 8 3 9 2 070 1 11/10 16°20'S 148°41'W 81.2 020 08 83.0 74.0 1012 01 8 3 9 2 080 1 11/10 16°20'S 148°41'W 82.1 050 10 83.5 76.6 1011 02 8 8 8 9 2 080 1 11/10 15°21'S 147°24'W 82.1 050 10 83.5 76.6 1011 02 8 8 8 9 2 080 1 11/20 11/20 15°21'S 145°04'W 82.1 050 10 81.1 75.1 1009 00 X 6 5 1 070 1 1200 11/20 14°56'S 145°04'W 82.1 050 18 81.1 75.1 1009 00 X 6 5 1 070 1 1200 11/20 14°56'S 145°04'W 82.1 050 18 81.1 75.1 1009 00 X 6 5 1 070 1 1200 11/20 14°56'S 145°04'W 82.1 050 18 81.1 75.1 1009 00 X 7 6 5 1 070 1 1200 11/20 14°56'S 145°04'W 82.1 050 18 82.2 76.8 1012 16 8 5 1 000 1 1200 11/20 14°56'S 145°04'W 82.1 050 18 82.2 76.8 1012 16 8 5 1 000 1 1200 11/20 14°56'S 145°04'W 82.1 050 18 82.2 76.8 1012 16 8 5 1 000 1 1200 11/20 14°56'S 144°04'W 82.1 050 18 82.2 76.8 1012 16 8 5 1 000 1 1200 11/20 14°56'S 144°04'W 82.1 050 18 82.2 76.8 1009 00 X 7 6 5 1 070 1 1200 11/20 14°56'S 144°04'W 82.1 000 00 11/20 11 00 X 7 6 5 1 000 1 1200 11/20 14°56'S 144°04'W 82.1 000 00 11/20 11 00 X 7 6 5 1 000 1 1200 11/20 14°56'S 144°04'W 82.1 000 00 100 00 00 00 00 00 00 00 00 00	161		11/11	14 º 40 !S	W101 " 9F1	83.4	140	0.7	2 2 3		1015	6	=	^	0	_	000		41, 5112	0 05.
1800 11/12 14°55'S 148°02'W 83.7 0840 14 83.8 77.0 1013 02 8 6 5 9 1 100 1 1 1 1 1 1 1	101		11/17	8,78,141	147"02'W	H4.0	1 30	13	R 3. 1.			2 2		: :	٠.		1.40	-	45.92	0.00
0000 11/13 15°01'S 147°57'W 83.0 150 16 82.5 76.4 1011 02 8.6 9 1 150 1 150 1 1/13 15°01'S 147°57'W 83.0 150 16 82.5 76.4 1011 02 8.6 9 1 150 1 150 1 160 1 1/13 15°01'S 147°38'W 82.0 120 11/13 15°01'S 148°48'W 80.5 110 14 80.0 72.5 1012 26 8 5 9 1 150 1 150 1 100 1 1/14 16°28'S 148°48'W 80.5 110 14 80.0 72.5 1012 00 X	104		11/12	14.55.8	148 "021W	7 28	080	7	R 4 H			20	3	-	\ =		100		16. 11	0 21
0320 11/13 14°56¹S 147°38¹W 82.3 140 11 82.5 75.4 1011 02 8.6 5 9 1 150 1 1800 11/13 15°13′S 148°00¹W 82.5 140 15 81.9 75.3 1012 25 8 5 9 1 150 1 0000 11/14 15°52¹S 148°16¹W 82.0 120 12 82.0 74.0 1010 15 8,5 6 9 1 150 1 0000 11/14 16°28¹S 148°48¹W 80.5 110 14 80.0 72.5 1012 00 X X 9 1 110 1 0000 11/14 17°22¹S 149°08¹W 79.3 130 15 79.5 72.8 1010 01 8 3 9 1 120 1 0000 11/19 15°22¹S 148°41′W 81.1 040 08 81.4 77.0 1010 15 8 6 8 1 070 1 0000 11/19 16°20¹S 148°14¹W 81.3 040 08 81.1 76.5 1010 00 X 5 5 2 070 1 0000 11/19 15°37¹S 147°25¹W 82.4 050 10 83.5 76.6 1011 02 8 3 9 2 080 1 0000 11/20 15°37¹S 147°25¹W 82.4 050 10 83.5 76.6 1011 02 8 3 9 2 080 1 0000 11/20 14°54°1 14°58¹S 146°21¹W 82.5 050 08 80.0 76.2 1010 16 X 5 9 1 050 1 0000 11/20 14°56¹S 144°30¹W 82.9 040 04 81.1 75.1 1009 07 X 6 5 1 070 1 0000 11/20 14°56¹S 144°30¹W 82.9 040 04 81.1 75.1 1009 07 X 6 5 1 070 1 0000 11/20 14°56¹S 144°30¹W 82.9 040 09 83.0 76.0 1012 01 X 7 6 1 070 1 0000 11/21 12°54¹S 144°30¹W 82.6 040 09 83.0 76.0 1012 01 X 8 1 000 1	194		11/13	15.01'S	147°57'W	83.0	1.50	91	200			70	: : : =:	7 77	٥ ،		150		36.24	0 10
1800 11/13 15°1345 148°00'W 82.5 140 15 81.9 75.3 1012 25 8 5 9 1 150 1 1 1 1 1 1 1 1 1	195		11/13	14.5618	1.17°38'W	82,3	140	1 1	82.5			70	8.6	-3		-1	100		,	
0000 11/14 15°5245 148°484W 80.5 110 14 80.0 72.5 1012 00 X X 9 1 150 1 1 1 1 1 1 1 1 1	961		11/13	15"13'S	148°00'W	82.5	1.10	1.5	81.9		1012	57	3	ī,	. 5	-	150	-	36.25	0.25
0600 11/14	197		11/11	15"52'8	148°16'W	82.0	170	71	8.2.0		1010	1.5	8.5	9	-		150	-	36.33	82.0
1200 11/14 17°024S 149°084W 79.3 130 15 79.5 72.8 1010 01 8 3 9 1 120 1 0000 11/19 17°224S 149°224W 81.1 040 08 81.4 77.0 1010 15 8 6 8 1 070 1 0000 11/19 16°504S 148°474W 81.2 020 08 83.0 78.0 1012 00 X 5 5 2 070 1 1200 11/19 16°204S 144°474W 81.3 040 08 81.1 76.5 1010 00 X 5 5 2 070 1 1200 11/19 15°475 147°254W 82.4 050 10 83.5 76.6 1011 02 8 3 9 2 080 1 12150 11/19 15°474S 147°254W 83.1 050 10 83.5 76.6 1011 02 8 3 9 2 080 1 12150 11/20 15°214S 147°254W 83.1 050 10 83.2 76.9 1009 02 8,1 5 9 1 050 1 1200 11/20 14°364S 145°404W 82.5 050 08 80.0 76.2 1010 16 X 5 7 1 070 1 1200 11/20 14°364S 145°404W 82.3 060 13 79.0 75.0 1012 16 8,6 7 6 1 070 1 1800 11/21 13°294S 144°304W 82.6 040 09 83.0 76.0 1012 16 8,5 6 8 1 000 1 0000 11/21 12°545 144°364W 82.6 040 09 83.0 76.0 1012 11 X X 8 1 000 1	198		11/14	16*28'5	148°48'W	80,5	110	14	80.0		1012	00	×	×	0	_	110	_	\$6.36	0.73
0000 11/19 17"22'S 149°22'W 81.1 040 08 81.4 77.0 1010 15 8 6 8 1 070 1 0600 11/19 16°50'S 148"47'W 81.2 020 08 83.0 78.0 1012 00 X 5 5 2 070 1 1200 11/19 16°20'S 148"47'W 81.3 040 08 81.1 76.5 1010 00 X 5 5 2 070 1 1800 11/19 15°47'S 147°38'W 82.0 050 08 83.0 74.0 1012 01 8 3 9 2 080 1 2150 11/19 15°47'S 147°25'W 82.4 050 10 83.5 76.6 1011 02 8 3 9 2 080 1 0000 11/20 15°21'S 147°04'W 83.1 050 10 83.2 76.9 1009 02 8,1 5 9 1 050 1 0000 11/20 14°36'S 146°21'W 82.5 050 08 80.0 76.2 1010 16 X 5 7 1 070 1 1200 11/20 14°36'S 145°40'W 82.9 040 04 81.1 75.1 1009 00 X 6 5 1 070 1 1800 11/20 14°36'S 145°04'W 82.3 060 13 79.0 75.0 1012 16 8,6 7 6 1 070 1 0000 11/21 13°29'S 144°30'W 82.6 040 09 83.0 76.0 1012 01 X 8 1 000 1	199		11/14	S.70°71	149°08'W	79.3	130	15	79.5		1010	0.1	8	*1	5		120	1	36,32	0.17
0600 11/19 16°50'S 148"47"W 81.2 020 08 83.0 78.0 1012 00 X 5 5 2 070 1 1200 11/19 16°20'S 147°38"W 82.0 040 08 81.1 76.5 1010 00 X 5 5 2 070 1 1800 11/19 15°47'S 147°25"W 82.0 050 08 83.0 74.0 1012 01 8 3 9 2 080 1 2150 11/19 15°37'S 147°25"W 82.1 050 10 83.5 76.6 1011 02 8 3 9 2 080 1 0600 11/20 14°58'S 146°21"W 82.5 050 08 80.0 76.2 1010 16 X 5 7 1 070 1 1200 11/20 14°36'S 145°04"W 82.9 040 04 81.1 75.1 1009 00 X 6 5 1 070 1 1800 11/20 14°36'S 145°04"W 82.3 060 13 79.0 75.0 1012 16 8.6 7 6 1 070 1 1800 11/21 13°29'S 144°30"W 82.6 040 09 83.0 76.0 1012 16 8.5 6 8 1 000 1 0600 11/21 12°54'S 143°56'W 82.6 040 09 83.0 76.0 1012 01 X X 8 1 000 1	700		11/19	5,77,41	M.72.6FT	81.1	01-0	0.8	81.4		1010	51	æ	9	æ	_	070	_	36.27	0.27
1200 11/19 16°20'S 148°14'W 81.3 040 08 81.1 76.5 1010 00 X 5 5 2 070 1 1 1800 11/19 15°47'S 147°38'W 82.0 050 08 83.0 74.0 1012 01 8 3 9 2 080 1 2 150 11/19 15°37'S 147°25'W 82.4 050 10 83.5 76.6 1011 02 8.1 5 9 2 080 1 1 0000 11/20 15°21'S 147°04'W 83.1 050 10 83.2 76.9 1009 02 8.1 5 9 1 050 1 1 000 11/20 14°58'S 146°21'W 82.5 050 08 80.0 76.2 1010 16 X 5 7 1 070 1 1 1200 11/20 14°36'S 145°40'W 82.3 060 13 79.0 75.0 1012 16 8.6 7 6 1 070 1 1 1800 11/21 13°29'S 144°30'W 82.6 040 09 83.0 76.0 1012 16 8.5 6 8 1 000 1 1 000 1 1 12°54'S 143°56'W 82.6 040 09 83.0 76.0 1012 01 X X 8 1 000 1	107	0090	61/11	16°50'S	148"47'W	81.2	070	90	83.0	78.	1012	00	×	6	2	2	070	-	36,36	0. 18
1800 11/19 15°47'S 147°38'W 82.0 050 08 83.0 74.0 1012 01 8 3 9 2 080 1 2150 11/19 15°37'S 147°25'W 82.4 050 10 83.5 76.6 1011 02 8 3 9 2 080 1 0000 11/20 14°58'S 147°04'W 82.5 050 08 80.0 76.2 1010 16 X 5 7 1 070 1 1200 11/20 14°36'S 146°21'W 82.9 040 04 81.1 75.1 1009 00 X 6 5 1 070 1 1800 11/20 14°36'S 144°36'W 82.3 060 13 79.0 75.0 1012 16 8,6 7 6 9 1 070 1 1800 11/20 14°36'W 82.6 040 09 82.2 76.8 1009 02 8,6 7 6 8 1 000 1 0000 11/21 12°54'S 143°56'W 82.6 040 09 83.0 76.0 10	707	1.000	11/19	16°20'S	148°14'W	81.3	010	90	81.1		1010	00	×	9	5	7	070	_	36.42	0.22
2150 11/19 15*37'S 147*25'W 82.4 650 10 83.5 76.6 1011 02 8 3 9 2 080 1 1 0000 11/20 15*21'S 147*04'W 83.1 650 10 83.2 76.9 1009 02 8,1 5 9 1 050 1 1 0600 11/20 14*36'S 146*21'W 82.5 650 08 80.0 76.2 1010 16 X 5 7 1 070 1 1 1200 11/20 14*36'S 145*40'W 82.9 040 04 81.1 75.1 1009 00 X 6 5 1 070 1 1 1800 11/20 14*03'S 145*04'W 82.3 060 13 79.0 75.0 1012 16 8,6 7 6 1 070 1 1 0000 11/21 13*29'S 144*30'W 84.0 350 06 82.2 76.8 1002 02 8,5 6 8 1 000 1 1 000 1 1 000 1 1 1 12*54'S 143*56'W 82.6 040 09 83.0 76.0 1012 01 X X 8 1 000 1	703		11/19	15.4718	147°38'W	82.0	050	0.8	83.0			10	×	50	5	2	080	_	36.32	27.0
0000 11/20 15°21'S 147°04'W 83.1 050 10 83.2 76.9 1009 02 8,1 5 9 1 050 1 1 060 11/20 14°58'S 1-6°21'W 82.5 050 08 80.0 76.2 1010 16 X 5 7 1 070 1 1 1200 11/20 14°36'S 1-16°40'W 82.9 040 04 81.1 75.1 1009 00 X 6 5 1 070 1 1 1800 11/20 14°03'S 145°04'W 82.3 060 13 79.0 75.0 1012 16 8,6 7 6 1 070 1 1 0000 11/21 13°29'S 1-14°30'W 84.0 350 06 82.2 76.8 1009 02 8,5 6 8 1 000 1 1 000 1 000 1 1 12°54'S 143°56'W 82.6 040 09 83.0 76.0 1012 01 X X 8 1 000 1	1.07		11/19	15"37'S	147°25'W	82.4	050	10	83.5			70	æ	3	6	7	080	_	1	1
0600 11/20 14°58¹S 146°21¹W 82.5 050 08 80.0 76.2 1010 16 X 5 7 1 070 1 1200 11/20 14°36¹S 145°40¹W 82.9 040 04 81.1 75.1 1009 00 X 6 5 1 070 1 1800 11/20 14°03¹S 145°04¹W 82.3 060 13 79.0 75.0 1012 16 8,6 7 6 1 070 1 1000 11/21 13°29¹S 144°30¹W 84.0 350 06 82.2 76.8 1009 02 8,5 6 8 1 000 1 1000 1 0000 11/21 12°54¹S 143°56¹W 82.6 040 09 83.0 76.0 1012 01 X X 8 1 000 1	507		11/20	15°21'S	147°04'W	83,1	050	10	83.2			20	8, 1	5	6	_	050	_	36, 13	0.23
1200 11/20 14*36'S 145*40'W 82.9 040 04 81.1 75.1 1009 00 X 6 5 1 070 1 1800 11/20 14*03'S 145*04'W 82.3 060 13 79.0 75.0 1012 16 8,6 7 6 1 070 1 0000 11/21 13*29'S 144*30'W 84.0 350 06 82.2 76.8 1009 02 8,5 6 8 1 000 1 00	907		11/50	14°58'S	M+12.91-1	82.5	020	0.8	80.0		1010	91	×	5	2	_	070	_	35.95	0.29
1800 11/20 14*03'S 145*04'W 82,3 060 13 79.0 75.0 1012 16 8,6 7 6 1 070 1 0000 11/21 13*29'S 144*30'W 84,0 350 06 82,2 76.8 1009 02 8,5 6 8 1 000 1 000 1 0000 11/21 12*54'S 143*56'W 82,6 040 09 83.0 76.0 1012 01 X X 8 1 000 1	207		11/20	14°36'S	145°40'W	82.9	040	0.4	81.1		1009	00	×	9 .	5	_	070	-	36.04	0.27
0000 11/21 13°29'S 1-14°30'W 84.0 350 06 82.2 76.8 1009 02 8,5 6 8 1 000 1 000 1 000 11/21 12°54'S 143°56'W 82.6 040 09 83.0 76.0 1012 01 X X 8 1 000 1	708		11/50	14-03-8	145°04'W	82.3	090	13	79.0		1012	16	8,6	7	9	_	070	_	1	67.0
0600 11/21 12*54'S 143*56'W 82.6 040 09 83.0 76.0 1012 01 X X 8 1 000 1	209		11/21	13°29'S	1-1-1-30'W	84.0	350	90	82.2	76.	1009	20	8,5	9	8	~	000	-	36.98	0.31
	710	0090	11/21	12.5415	143°56'W	9.78	0.10	60	83.0	76.	1012	0.1	×	×	æ	-	000	-	35,77	0.23

Table 2. --Observations at bathythermograph lowerings, Charles H. Gilbert crulse 35 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

	. ;																																				
Surf.	РО ₄ -Р. µg at. / L.	0,31	0.27	0.72	0.30	0.29	0.29	ı	ı	1	0.34		1	0°30	ŧ	1	1	ı	1	0.36	1	ı	,	1	1	ı	1	£	0.43		0.79	ı	0.37	E	0.36	1	0.42
Surf.	Bal.,	35.72	35,85	35.95	35,84	35.85	35,79	1	J	B	35.75		1 1	35,70	1	ž	3	1	1	35,71	1	1	ı	1	1	ı	1	1	35,64	1	35.68	3	35,64	1	35,64	ł	35.62
_	Amt.	_	-	П	-	_	_	3	3	7	-			_	_	0	_	~	_	_	П	p=00	_	-	_	_	_	_	-	-	_	_	peralal	_	-	_	~=
Swell	Dir.	000	0.10	040	090	050	050	050	050	090	090		090	0.70	040	000	170	1.40	080	090	090	090	0.40	080	080	080	060	080	060	060	0.50	050	090	090	090	080	090
	Sea	L-3	2	2	~	7	~1	7	~	~	E		-1	7	~1	_	→	<u> </u>	~1	_	П	-	_	~	_	p=00	7	_	_	_	_	~2	-2	~	-:	~1	7
γιτ	Visibil	5	6	6	6	ń	6	2	7	6	6		5	6	6	6	6	6	6	6	6	6	0		0	6	6	6	6	6	6	6	6	6	1	æ	6
ds	Cover	2	~	3	3	7,	3	80	9	2	3		n (3	3	7	9	3	7	2	2	-1	^3	-1	<u>-</u>	÷	1.	2	~	9		7	-3	7	22	9	
Clouds	Type	8	8	8,5	×	×	8,6	9,8	8,6	æ	æ		20 :	æ	æ	æ	æ	8	8	æ	*	Ж	×	×	≅	8,6	8,6	8,6	8,4	8,5	8,5	18, 4	20	×	æ	8,4	H. 4
	Weit-	0.1	70	0.5	70	70	70	03	0.1	0,	0.5		70	70	0.5	0.1	0.3	20	70	0.1	20	70	70	70	63	0.3	0.3	0.1	0.3	6.3	70	70	0.1	70	0.3	70	70
Baro		1010	1012	1010	1012	1011	1013	1011	1009	1011	1009		1011	6001	1011	1010	1010	1010	1010	1008	1009	1011	1010	1001	1010	1012	1012	1010	1014	1012	1010	1011	1013	1013	1011	1012	1014
	Wet nbulb, e.F.	75.1	76.5	75.6	76.3	76.0	76.2	6.97	76.5	75.1	75.4	1	77.0	76.0	75.5	75.6	76.8	0.97	76.8	76.2	75.0	75.1	76.5	76.2	76.0	75.7	74.5	75.9	76.0	0.97	76.0	48.9	76.0	76.0	76.2	9.92	9.97
Alr temp.	Dry bulb, b	82.3	83.2	83.5	83.0	81.9	81.0	83.1	83.1	82.1	81.9			84.5	9.78		84.0	84.5	83.1	82.9	81.4	82.9	H3.3	83.5	82.5	81.1	80.9	81.0	82.5	82.5	83,0	82.4	82.0	81.3	81.1	81.2	H
q		12	13	60	71	11	13	18	13	16	1.1		12	1.7	17	90	60	04	11	10	60	20	6.7	6.7	60	60	10	1.2	18	14	13	13	13	1.4	1.7	16	10
Wind	Dir., Force, Tr. kt.	040	030	030	080	080	070	040	040	090	090	i i	050	070	040	020	100	100	050	0.50	080	090	0.70	040	080	070	060	030	060	070	020	080	090	090	050	050	060
Bkt.	. :	82.9	82.0	83.1	82.3	84.5	82.0	82.1	82.5	82.1	81.9	-	82.6	82.1	82.6	83.5	82.8	83.4	83.4	83,1	81.4	81.5	83.1	83.5	83.9	82.0	81.7	81.8	0.28	87.8	H2.2	82.4	81,8	81.9	81.3	81.2	81.5
	Longitude	143°22'W	142°48'W	142°13'W	141°40'W	141°08'W	140°35'W	140°38'W	140°41'W	140°10'W	139°44'W		139°13°W	139°30°W			138°50'W	139°09'W	139°41'W	139°56'W	139°49'W	139°51'W	130 * 521 W	139*50'W	139°50°W	I39"50'W	139-52'W	M,75.6EI	140°42'W	140 * 54 W	141 08 W	W122-111	141°37'W	141"52"W	W142"04'W	142°19'W	142°30°W
	Latitude	12.22'S	11.46'S	11*12'S	10°37'S	10.04'S	S,87.60	08.7148	08.1218	07.5245	08 0115		08.51.8	08.29.2	09*42'S	10.00.8	10.08'S	10.02'S	09°38'S	8,42,60	09°34'S	09°33'S	00 • 34 (S	S.J.C. 60	09"34'S	09"34'5	09*3145	09*3418	07.5418	8,08,20	8,80,20	06*46'8	8.1.7.90	S ₁ 70.90	05"4218	8,02,50	04"5515
	Date, 1957	11/21	11/21	11/22	11/22	11/22	11/22	11/24	11/24	11/25	11/26		11/26	11/27	11/27	11/28	11/28	11/29	11/30	12/1	12/1	12/1	12/1	12/2	12/2	12/2	12/21	17/71	17/4	12/4	17/2	12/8	12/5	12/5	12/5	5/21	12/5
	Tlme, GCT	1200				1200	1800	2120	2328	2045	0000					2125	2330	2045	2130	0000	1500	1800	2100		0300	0090	0060	1200	1800	2100	0000	0300	0090	0060	1200	1500	1800
	Ser.	211	212	213	214	215	216	217	218	617	220		177	777	223	777	225	977	277	H22	529	730	131	232	2.33	234	235	736	237	238	239	240	241	21.7	243	244	245

Table 2. --Observations at bathythermograph lowerings, Charles H. Gilbert cruise 35 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

9-11	H 00		0.44	, ,	0.34	1	0 42	1 1	0.37	. I	0.37	1	0.35	ŧ	0.33	1	0.23	. 1	0.42	ì	0.39	ı	0.35	1	0.44	i	0.38	ı	1	,	,	ı	ı	i	í	1
7	Bal.,		35.62	1	35.52	ı	35.50	'	35,35) . t	35.34		35.12	,	35.03	1	35.03	ı	35.03	ı	35.01	1	35.05	ı	35.10	ı	35.12	,		,	ı	ı	1	,	6	
-	Amt.	-	-	-	_	H	-	p-4	-	_	_	-	Н	Н	_	н	П	-	Н	_	П	П	_	1	П	2	_	н	П	П	-	Н	2	2	7	2
Swell	Dir.	080	070	070	070	070	070	070	060	060	060	130	130	130	130	130	140	140	130	130	130	130	130	130	130	100	110	070	040	040	090	090	090	090	070	050
	Sea D •	<u>س</u>		2		2	2	2		2	23	3	3	3	3	2	3	3	3	2	3	3	2	2	2	2	2	2	2	7	2	2		2	2	3
ξţλ	LidiaiV	6	6	00	6	6	7	00	6	6	6	6	Z,	00	2	00	œ	00	6	6	6	6	2	2	7	oo								6		
	Cover	4	9	ıΩ	2	2	4	9	4	4	9	7	00	9	4	41	9	9	Ŋ	4	9	4	9	9	00	9	00	7	9	٣	4	4	4	4	7	7
Clouds	Туре	00		8,5		8,6	00	8,5		∞			9,8		9,8	8, 1	8,4		8,4	8,4	8,4	∞			8,5			8,5		80	80	8	8, 4, 1	8, 4, 1		8,4
	Wea-	02	02	02	0.1	02	02	03	02	02	03	15	12	02	0.1	0.1	03	02	02	02	0.2	02	15	15	21	01	03	02	0.1	0.1	02	02	02	02	16	16
Baro.	meter,	1013	1010	1011	1012	1014	1012	1012	1014	1013	1011	1012	1014	1014	1012	1013	1014	1013	1011	1012	1014	1014	1012	1012	1014	1013	1010	1010	1012	1012	1010	1010	1012	1011	1009	1010
temp.	Wet rbmb,	76.5	76.5	76.8			76.0			76.8			77.1			76.1	76.0		77.0					7.	76.3		77.9	77.5	77.2	76.0	75.5	75.1	76.0	76.0	7	6.92
Air te	Dry bulb,	82.2	2	82.1	2	82.0	_;	81.8	3	83.2	83.2		78.0	81.5	81.9	81.4	83.2	84.8	82.9	82.9					78.8		82.1	81.8	82.0		81.5			82.8	80.5	80.9
pı	Force, kt.	20	13	12	15	13	13	15	16	15	16	16	07	11	14	16	14	11	13	11	60	0.8	10	60	10	10	0.5	60	0.7	90	07	90	90	60	12	14
Wind	Dir.,	060	080	080	090	090	070	070	080	070	060	150	130	120	130	120	140	130	120	130	130	130	110	110	120	100	060	090	070	090	020	060	090	090	090	070
Bkt.	:			82.1			81.8	i	82.1	3.	83.0	$\vec{-}$	81.8		81.9	5	82.3	83.0	83.1	82.5	82.0	82.2	2.	2.	82.0	82.5	82.9	85.8	82.2	83.0	83.5	83.4	82.8	83.8	83.5	82.9
	Longitude	142°44'W	142°58'W	143°11'W	143°21'W	143°30°W	143°38¹W	143°47'W	143°56'W	144°05'W	144°15'W	144°27†W	144°38'W	144°49°W		145°12'W	145°26'W	145°40'W	145°54'W	146°09'W	146°24°W	146°39'W	146°52°W	147°08'W	-	I47°38'W	147°50'W	148°02'W	148°12'W	148°24'W	148°34'W		148°57'W	149°08'W	-	149°36°W
	Latitude	04°32'S	04°11'S	03°50'S	03°27'S	03.0218	02°38'S	02°14'S	01°50'S	01°26'S	01.02'S	00°38'S	00.12,2	N,80.00	00°27'N	00°48'N	01.60°10	01°30'N	01°52'N	02°14'N	05°36'N	02°58'N	03°19'N	03°42'N	04°05'N	04°28'N	04°50'N	05°14'N	05°37'N	N,00.90	06°21'N	06°44'N	N, 20. 20	07°30'N	07°53'N	08°16¹N
	Date, 1957	12/5	12/6	12/6	12/6	12/6	12/6	12/6	12/6	12/6	12/7	12/7	12/7	12/7	12/7	12/7	12/7	12/7	12/8	12/8	12/8	12/8	12/8	12/8	12/8	12/8	12/9	12/9	12/9	12/9	12/9	12/9	12/9	12/9	12/10	12/10
	Time, GCT	2100	0000	0300	0090	0060	1200	1500		2100	0000				1200	1500	1800	2100	0000							2100		0300	0090							0300
	Ser.	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	992	267	268	569	270	271	272	273	274	275	276	277	278	279	280

Table 2. --Observations at bathythermograph lowerings, Charles H. Gilbert cruise 35 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont^{1d})

Surf.	H 3		ı	ı	t	ı	ı	ı	ı	ı	ı		1	ı	,	1	ı		ł
Surf.			1	ì	ı	ı	1	i	1	1	ı		1	ı	1	ı	1		1
11	Amt.	2	4	4	4	4	4	4	4	4	4		4	4	4	4	4		4
Swell	Dir.	090	090	050	090	020	030	030	050	050	050		040	050	050	050	050		050
	Sea	3	3	3	3	2	7	3	3	3	3		3	2	2	2	4		5
īţţλ	Visibil	œ	00	Ŋ	2	7	2	6	00	6	6		7	6	6	œ	rU		9
ds	Cover	×	9	Ŋ	2	00	9	9	2	×	4		2	9	7	×	œ		80
Clouds	Type	×	8,6	8,5	8,4	8,4	∞	8,4	8,5	×	80		4,8	8,4	8,5	×	00		8,4
	Wea- ther	00	02	02	02	03	02	02	02	00	02		02	02	03	00	03		0.5
Baro-	meter, mb.	1011	1012	1010	1011	1013	1012	1010	1010	1012	1014		1011	1012	1011	1014	1013		1012
	Wet nbulb,		76.5	76.4	76.5	76.5	77.0	77.3	77.3	76.0	77.0	,	76.1	76.0	76.0	74.0	73.0		69.1
Air temp.	Dry bulb,	81.0	81.8	81.0	81.0	81.2	82.0	81.1	80.7	81.5	80.5		80.1	80.0	80.1	79.0	77.0		76.5
pq	Force, kt.	16	15	13	16	15	15	16	13	17	19		19	18	17	22	24		22
Wind	Dir., °T.	090	090	090	070	070	090	080	080	080	070		090	090	020	090	040		050
Bkt.	temp., F.	82.1	81.8	82.0	81.0	80.5	81.8	80.9	80.5	80.0	80.0		80.1	79.8	80.1	79.2	77.9		77.8
	Longitude	149°51'W	150°06'W	150°19'W	150°34'W	150°48'W	151°03'W	151°18'W	151°34'W	151°51'W	152°08'W			152°57'W	153°30'W	153°56'W	154°22'W		155°16'W
	Latitude	N,68.80	N. 80.60	09°24'N	09°48'N	10°11'N	10°36'N	10°57'N	11°18'N	11°39'N	12°02'N		12°21'N	13°06'N	13°50'N	14°35'N	15°20'N		16°49'N
	Ser. Time, Date, No. GCT 1957	12/10	12/10	12/10	12/10	12/10	12/10		12/11	12/11	12/11		12/11	12/11	12/12	12/12	12/12	ide	0000 12/13
	Time	0090	0060	1200	1500	1800	2100	0000	0300	0090	0060			1800	0000	0090	1200	No slide	0000
	Ser. No.	281	282	283	284	285	286	287	288	289	290	(291	292	293	294	295	296	297

Table 3. --Observations at bathythermograph lowerings, Hugh M. Smith cruise 43 (coded according to H. O. Pub. 606-c, second edition, 1956)

4.	,-P.													,	1										,								1			
Surf	백광	'	1	'	'	1	,			1	'	1	1	•		•				•	•															
Surf.		4.7	4.7	4.	~	4.0	34.74	34.76				35.19	5.1	ı	ı	1	1	ı	ı	ı	ı	ı	ı	ı	ı	1	ı	ı	ı	1	1	1	ı	•	1	1
11	Amt.	4	4	4	4	9	×	4	4	4	4	7	4	3	_	_	×	7	7	~		П	_	~	~	_	~ .			_	_	П	-	_	3	2
Swell	Dir.	44	350	350	350	320	XXX	350	350	4	350	350	330	340	340	070	350	020	070	040	030	040	030	090	020	0 2 0	0.20	090	0 2 0	<u>-</u>	010	010	010	070	040	020
	ses H.	4	4	5	5	9	9	2	5	2	2	2	4	3	2	3	3	3	3	3	3	4	4	4	3	4	4	4,	4	4	4	4	4	2	2	2
Kay.	IldialV	00	00	00	7	2	7	7	2	9	7	7	2	00	00	7	7	~	7	7	7	7	2	9	2	7	~	7	2	7	7	7	7	2	2	7
ds	Cover	9	2	2	9	×	×	9	×	00	7	7	7	3	3	×	4	9	4	2	2	2	3	×	7	3	2	7	3	×	×	7	2	3	4	9
Clouds	Type	00	00	∞	00	×	×	00	×	∞	∞	4,8	00		4,8	×	4,8	4,8	00	00	8,4		8'9	×	00	4,8	00	~	8,9	×	×	4	00	4,8	00	+
	Wea- ther	80	0.1	0.2	03	03	0.2	02	0.2	80	0.5	0.2	15	0.1	02	03	80	0.1	0.1	0.1	15	0.1	03	0.1	0 1	0 1	0.1	0.5	03	0 1	0.5	03	0 1	0.1	03	03
Baro.	meter,	1019	1016	1016	1017	$\overline{}$	1019	1017	$\overline{}$	1019	1021	1017	1017	1018	1016	1017	1018	1018	1016	1017	1016	1016	1013	1014	1013	1014	1014	1010	1011	1012	1012	1011	1012	1012	1012	1010
temp.	Wet bulb,	9	65.5	63.0	3	3	3	6	0	61.2	0	61.0	60.8		66.4	65.4	65.7		68.6	68.7		71,8		73.8	74.0	74.0		3.	74.8	75.1		74.0	73, 1	74.0	74.8	5
Air te	Dry bulb,			73.0	0	œ	6		68, 7	9	68.3	69.0	70.0	72.0	73.8	73.9	73.7	71.2	74.6	75.5	75.8	76.3				79.0	79.0	79.7	79.8	80.3	80.4	79.5	80.0	81.0	81.2	81.6
P	Force, kt.	2.1	2.1	29	25	25	31	26	23	29	22	2.1	19	20	0.7	19	2.1	15	15	19	16	17	17	18	16	18	19	18	18	19	2.1	19	19	24	24	18
Wind	Dir.,	340	010	350	360	010	360	360	350	340	350	360	360	030	360	090	030	050	010	090	090	040	070	090	080	070	080	070	070	070	0.20	080	070	010	090	090
110	•		5	74.7						72.7		73. 1		74.8			75.9	76.0	76.2	77, 1	49.9	77.3	78,5	78.6		78.5				80.5	80.8	79.2		81,4	81.8	82.3
	Longitude	158°16'W	200	159 00'W	00.	158°42'W	2.4	7 07 0	158°00'W	8.02	~	157°58'W		156°36'W	156°08'W	×0	155°15'W	154°47'W	0.1	P==	153°31'W	153°02'W	~	- 01	151°53'W	151°32'W	151°22'W	151°10'W	150°58'W	150°46'W	150°34'W	150°21'W	ന	149°53'W	149°38'W	149°23'W
	Latitude	N192016	21021	N 52 12	7 10 35 N	21-35'N	21.35 N	71.52 IV	22 04 IN	Z2.20'N	22°18'N	V1-5612	21.36.N	N.08.61	18°43'N	18.051N	17.18'N	16°33¹N	15°48'N	15.03'N	14°26'N	13.40'N	12°58'N	12 • 13'N	11°35'N	10°51'N	10°32'N	N.90.0I	09°44'N	09°24'N	N,80.60	N174.80	08°26'N	N,90.80	07.46'N	07*25'N
	Date, 1958	1/3	1/2	1/3	1/4	1/1	1/1	1/4	1/4	1/4	1/4	1/4	1/1	1/5	1/6	1/6	1/6	1/6	1/7	1/7	1/7	1/7	1/8	1/8	1/8	1./8	1/8	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/10
	Time, GCT	2100	2001	0222	0770	0415	7 000	1400	1400	1855	2015	2240	1 0	1818	0000	0090	1200	1800	0000	0090	1200	1800	0000	0090	1200	1800	2100	0000	0300	0090	0060	12.00	1500	1800	2100	0000
	Ser. No.	_	٠ ,	7 "	0 -	1 ' 11	n v	1 0	- 0	0 0	10	=	11	7 7	1 4	, <u>r</u>	16	17	00	6	20	2.1	2.2	2 2	2.4	25	26	27	2.8	29	30	3.1	3.7	3 6	, ε, 4,	35

Table 3. --Observations at bathythermograph lowerings, Hugh M. Smith cruise 43 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

	i																																			
Surf.	РО4-Р, µg at./L.	ŀ	ı	ł	ı	ı	3	0.13	1	0.18	1	0.14		0.11		0.21	1	0.23	ı	0.18	1	0.43	1	0.32	, ,	7.0	ı	0.31	1	0.30		0.52	1	0.42	1	0, 10
Surf.	gal.,	1	1	4	1	ı	1	34.45	ı	34.78	ı	34.99	1	34.99	1	34.94	1	35.05	ı	35.17	1	35.28	1	35.34	1 100	25.57	ı	35.37	1	35.48		35,46	ı	35.43		35.62
_	Amt.	m	3	3	3	 4	~	3	3	3	~	×	×	proof	-	_	-	_	_	×	×	sd 1	1			-		-	_	_	a4		-	-	_	_
Swell	Dir.	070	070	070	020	020	020	020	020	0.40	110	XXX	XXX	110	110	110	110	110	120	XXX	XXX	120	060	110	060	060	110	110	110	110	100	110	100	100	110	110
	Sea H •	6			3	3	3	Θ.	~	3	3	~	3	~	ń	m	3	3	3	∞	Ø	6	· ·	m (.n c	n	3	3	~	2	7	2	~	3	3	(*
Līţî	Visibil	~	2	2	5	5		2	J.	5	2	2	5	5	9	~	2	7	9	×	×	~	~	2	r 1	_	9	2	2	2	7	2	2	2	2	2
	Cover	7	2	×	6	6	00	000	00	00	00	×	×	2	œ	7	7	3	2	×	×	2	2	2	7	ν	2	×	×	2	М	2	2	2	2	×
Clouds	Type	2.4.8		×	×	×	8			0,8		×		6,8		0, 1, 4, 8	1,4,8	1,8	×	×	×	2,8	1,8	1, 8	ω, ,	× ÷	×	×	×	2,8,9		80	80	œ	×	>
	Wea- ther	03	03	0.2	2.5	80	63	80	02	0.2	0.2	0 1	00	03	00	02	02	0 1	0 1	00	00	0 1	03	02	02	03	0 1	0.5	0.5	02	02	02	02	02	02	6
Baro-	meter,	1010	0.1	1012	1010	1011	1013) C	1010	1010	1011	1012	1010	1010	1012	1012	1009	1009	1011	1011	1010	1010	1012	1010	1008	1090	1010	1011	1010	1010	1012	1010	1009	1009	1010	0 . 0
_	Wet m	• .	76.8			77.8		77.0		7		~	2	5	77.3		16.0	76.6	77.0	75.5					75.7		75.8		76.0	76.5		75.5	76.5		76.5	
Air temp.	Dry bulb, b	-	81.8	œ	3	2		1 -	, c	2	_	2	_	0	2.4	2	7	5	00	3	0	80.7	4	3	82.5	2			7	2	9	00	5		a4	
75	Force, kt.	200	0 0	23	20	17	0	10	18	16	18	19	17	18	17	17	15	14	19	16	18	11	14	17	17	12	11	10	11	10	14	12	12	12	11	
Wind	Dir., J	050	040	030	030	040	000	000	070	080	100	120	120	130	130	110	120	120	110	110	110	110	100	110	110	060	110	100	110	110	130	120	060	060	060	
4-10	temp.,	27 4	20.18	87.3	82.8	82.8	0	02.0	0.70	83.0	82.4	83.0	82.4	82.0	82.3		82.6	82.4				81.7			82.2		82.2			82.3			83.1	83.0	82.8	
	Longitude	1 -	149°12°W		-	148°24'W			147-58.W	147°34'W			-	-	-	-	146°12'W	146°05'W	-	-	145°38'W	145°28'W		145.08'W	-	144°44'W	144°32'W	-	_	-	-	143°33'W	-	me	142°49'W	
	Latitude		N.40, 70	N. 74, 00	N.97.90	05°45'N		05°25'N	05 04 N	04 44 N	04 °00'N	03°44¹N	03°24'N	03°03'N	02.42'N	02.22'N	N120.20	01°42'N	01°22'N	01.02'N	00 • 41'N	00°20'N	00.04'S	00.2815	00.2018	01.12.8	01.35'S	01.535	02.15'S	02°38'S	03.00.8	03°22'S	03.45'S	04.09'S	04°32'S	
	Date, 1958		1/10	1/10	1/10	1/10		1/10	1/10	1/11	1/11	1/11	1/11	1/11	1/11	1/11	1/12	1/12	1/12	1/12	1/12	1/12	1/12	1/12	1/13	1/13	1/13	1/13	1/13	1/13	1/13	1/13	1/14	1/14	1/14	
	Time, GCT		0300	0000	0060	1500		1800	2100	0000	0000	0000	1200	1500	1800	2 100	0000	0300	0000	0915	1200	1500	1800	2100	0000	0300	0090	0000	12.00	1500	1800	2 1 0 0	0000	0300	0090	
	Ser. No.	_	36			40		4		م الم												56			59		(4)									

Table 3. --Observations at bathythermograph lowerings, Hugh M. Smith cruise 43 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Surf.	PO4-P,	ı	0.38	ı	0.30	1	0.30		0.27	,	ı	0.26	1	0.09	0.30	r	0.21	I	0.30	ı	i	ı	ı	å.	ı	ı	ı	j	,	0.17	ı	ı	0.19	0.23	0.19	0.40
Surf.	sal.,	,	35.66	1	35.70	ı	35.66	ı	35.61	ı	ı	35.75	ı	35.70	35.70	35.71	35.79	1	35,75	ı	ı	ı	ı	ı	ı	ā	ı	ı	1	35.82	1	ı	35.79	35.82	35.86	35.84
=	Amt.	-	_	_	_	_	_	_	×	×	-	7	_	~	_	_	_	7	_	-	-	-	_	_	_	~	_	_	_	_	_	_	2	2	2	2
Swell	Dir.	110	100	110	100	100	100	100	XXX	XXX	080	080	080	010	0.20	020	010	080	030	080	080	080	080	080	080	080	080	080	090	020	080	080	060	060	060	060
	Sea	3	2							7		~	3	4		3				2					7					2		2		3		
11th	Maibi	7	2	2	00	∞	00	7	00	7	00	∞	00	00	00	00	00	6	2	00	00	9	9	9	9	9	2	2	2	7	7	2	6	9	5	2
		×	2	2	2	2	^1	2	×	×	9	9	5	4	9	3	2	9	9	[-	9	×	×	×	×	×	~	9	9	4	4	5	9	×	×	×
80	Cover																		00																	
Clouds	Type	×	00	1	00	00	∞	×	×	×	2, 1, 8	2,8	2, 1, 8	8,5	2,8	2,8	8,5	8,2	0,2,5,	4,	8 , 9	×	×	×	×	×	6,8	1,8	6,	1,2,8	1,8	1,8	1,2,8	×	×	×
	Wea- ther	00	02	02	02	02	0.5	0.2	02	00	03	03	0.1	02	0.1	01	01	03	15	03	02	02	0.5	02	05	00	03	0 1	70	0 1	02	0 1	0 1	00	81	00
Baro-	meter,	1010	1010	1012	1011	1009	1010	1012	1012	1010	1008	1008	1005	1008	1008	1011	1010	1012	1014	1011	1012	1013	1013	1013	1012	1012	1012	1014	1013	1013	1011	1012	1010	1012	1012	1010
emp.	Wet bulb,	76.2	70.0	77.4	76.8	76.8	76.8		76.5		78.6	78.8	77.8	76.5	77.0	77.3			77.0	76.2		77.8	76.7	75.4	77.8	75.8	75.0	76.8	77.5	77.8		76.8	77.2	76.9	75.3	76.2
Air temp	Dry bulb,		81,5	83,5				82.8	82.2	82.0	85.6	86.0	87.7	82.7	85.2	84.5	85.4	84.2			82.9	85.0	83.4	82.6	84.0	80,5	80.2	,82.1	84.0	85.0				84.0	78.6	
pı	Force, kt.	0.8	60	11	60	11	11	11	60	11	18	18	13	14	15	91	14	12	11	20	10	80	80	60	10	12	80	90	13	10	80	08	12	14	18	15
Wind	Dir., °T.	110	080	020	080	0.40	090	070	080	0.20	020	020	090	040	040	090	090	040	020	040	090	090	090	020	010	010	090	030	050	040	020	080	040	060	080	060
Rkt	temp.,	82.4	82.3	82.7	83.0	83,4	82.8	82.8	82.8	82.8	83.7	83.8		82.8	83, 1	83,5		83, 3	83.5		83.8	83.7	83.4	83.2	84.5	83, 3	85.9		83,7	84.1	84.5	83.9	83.8	83.8	83,3	83,3
	Longitude t	142 °20'W	142°05'W	141°52'W	141°39'W	141°27'W	141°14'W	141°02'W	140°47'W	140.29'W	140°38'W	140°40'W	140°45'W	140°14'W	139°12'W	138°58'W	138°52'W	4,1	2	139°51'W	139°50'W	139.50'W	139°50'W	139°50'W	139°50'W	139°49'W	N:05.681	6.2	6.2	9.6	139°50'W	140.08'W	139°38'W	139°17'W	139°02'W	138°48'W
	Latitude	05.1775	05.3915	06.0518	06.30'S	06.56'S	07*23'S	07.47.5	08.1315	08.38'S	08°34'S	08.30.8		07.51'S	33	-	8,62.60	10.04'S	8185.60	8,32,8	09.32.8	8,32,8	09*34'S	09*34'S	09*34'S	09 * 34 'S	09 * 34 'S	09.34'S	09*34'S	09.34'5	09.34'S	S160.60	09*12'S	09.12'S	09.1215	09.12'S
	Date, 1958	1/14	1/14	1/14	1/14	1/15	1/15	1/15	1/15	1/15	1/18	1/18	1/19	1/19	1/20	1/21	1/21	1/22	1/23	1/24	1/24	1/24	1/24	1/24	1/24	1/24	1/24	1/24	1/24	1/24	1/24	1/25	1/28	1/28	1/28	1/28
	Time, GCT	1200	1500	1800	2100	0000	0300	0090	0060	1200	2015	2100	0125	2110	2110	2015	2200	2040	2100	0115	0315	0200	0020	0060	1100	1300	1500	1700	1900	2100	2300	1810	0300	0090	0060	1200
	Ser.	7	7.5	7.2	7.4	7.5	76	7.7	78	79	80	81	82	83	84	85	98	87	88	89	06	91	6	93	94	96	96	16	86	66	100	101	102	103	104	105

Table 3. --Observations at bathythermograph lowerings, Hugh M. Smith cruise 43 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

,	ouri.	РО4-Р, иg at./L.	0.20	0.28	0.30	0.29	í	. 2	. 3	0.19	. 2	۲.	. 3	. 3	۲.	. 2					0.31			1	0.14	0.28	0.30	~	0.20	3	Ξ.	٦.	۲.	Τ.	-	0.19	Π.
		8al.,	5.7	35.82	5.7	5.7	ı	10	5.	35.71	ń	'n	5	5.	Ŋ.	ιςi	ů.	5.7	7 .	5.7	35.82	5.8	5.8	1	5.6	35.81	5.7	5.8	35.82	5.8	ı	ı	5.8	5.	5.9	35.91	5.9
-	T	Amt.		2			2			3													4	4	4	4	4,	4	4	4	4	4	4,	4	4	4	4
Swell	-	Dir.	080	080	080	060	060	060	080	080	080	020	080	080	060	120	120	071	120	150	130	080	100	100	100	100	100	100	100	100	100	060	060	020	080	080	060
H	_	59S		3						3 (4				~													3 (
Ĺλ	111	VisiV	7	2	2	7	7	7	9	9	9	9	2	2	2	9	9	5	9	2	2	2	2	2	œ	9	9	9	7	2	7	2	2	9	9	9	7
8		Cover	3	9	1	9	5	5	×	×	×	∞	9	4	œ	2	×	. 2	×	5	5 7	80	2	5	2	×	×	×	2	5	4	5	2	2	2	×	5
Clouds		Туре	8,5,1	4,6	4,6	4,8,3	4,8	8,6,2	×	×	×	6,4,8	ţ,	4,6	0	0,4,3	×	×	×	œ		4	0,8,5	2,5	2,4,8	×	×	×	00	00		8, 1		00	00	×	1,8
	Wea	ther	00	02	03	15	0 1	0.2	00	00	00	00	02	0.1	19	0 1	0.2	02	00	15	15	0.2	15	0 1	0 1	00	00	00	00	0 1	0.1	02	0 1	0.1	02	00	03
	Baro-	meter, mb.	1010	1012	1011	1010	1009	1010	1011	1011	1010	1011	1011	1012	1011	1011	1010	1010	1009	1011	1012	1013	1011	1010	1011	1012	1012	1010	1012	1012	1011	1010	1010	1011	1012	1010	1012
- um	. [Wet rbulb, F.		77.0				77.6		76.2		5.		œ	4.	75.3	9						77, 1			77.0		76. 2				77.7				76.4	
Air temn		Dry bulb,	2	83.0	ij	8	4.	82.8	82.5	82.4	81.0	79.5	82.0	87.0	77.6	81.0	83.0	2		. 2	2	3	82.0	2	-	81.5		_	82. 1	i m	3	3	~	3	83, 1	82.5	82.2
7	1	Force kt.	14	17	16	10	11	13	14	0.1	10	12	11	80	2.7	32	26	14	15	60	10	16	90	12	12	16	12	4	12	16	18	20	17	16	12	15	60
Wind		Dir., °T.	070	090	070	080	080	120	080	150	080	360	010	040	110	110	060	030	060	110	160	050	030	060	060	090	020	080	060	060	060	080	080	090	080	080	060
	Bkt.	temp.,	١.	83.0	3		3		3	83.0	7	2	7		2	2	2	~				3	83.9	3	3	3		83 7	83.3	83.5	83,5	83.9	83.8	84.0	83,5	83.6	83.4
		Longitude	138°28'W	138°06'W	137°50'W	137°28'W	137°25'W	137°11'W	136°50'W	136°33'W	136°18'W	136°00'W	136°25'W	136°44'W	137°06'W	081	137°29'W	137 • 491 W		138°31'W			139°36'W		38	40'	139°40'W	130°38'W	9.381	40.4	431	139°45'W	₹.	39°36	361		321
		Latitude	00.1219	09°15'S	09.1815	09*2015	8,21.60	09.1218		09.10'S			09.10'S	8,01,60	8,60.60	8,12,8	09.12'S	00.1215	00 1215	09*1715	09.1215	09.1215	S,60.60	8,50.60	09.1218	09°37'S	5,55,60	10.1415	10.3015	10.54'S	11.16'S	11°36'S	11.58'S	12.02.5	12.2015	12°31'S	12°52'S
		Date, 1958	1/28	1/28	1/28	1/29	1/29	1/29	1/29	1/29	1/29	1/29	1/29	1/29	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/31	1/31	1/31	1/31	1/31	1/31	1/31	1/31	1/31	2/1	2/1	2/1	2/1	2/1	2/1
		Time, GCT	1500	1800	2100	0000	0115	0300	0000	0060	12.00	1500	1800	2100	0000	0300	0090	0000	1200	1500	1800	2.100	0000	0200	0300	0090	0060	1200	1500	1800	2.100	0000	0300	0090	0060	1200	1500
		Ser.	104	107	108	100	110	_	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	12.7	12.8	129	130	133	132	133	134	135	136	137	138	139	140

Table 3. --Observations at bathythermograph lowerings, Hugh M. Smith cruise 43 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

					Bkt	Wind	nd	Alr temp	<u> </u>	Baro-		Clouds		Kar	S	Swell	Surf.	Surf.	
Ser.	Time, GCT	Date, 1958	Latitude	Longitude	temp.,	Dir.,	Force, kt.	Dry bulb,	Wet nbulb,	meter, mb.	Wea- ther	Type C	over	lidiaiV Sea	Dir.	Amt		H 90	
141	1800	2/1	12.42.5	139°40'W		080		١.,	7.2	1012	0.1		4	-	080		35.95	0.20	
142	1905	2/1	12.31'S	139°40'W		100			9.4	1012	03	4,8	9		080		,	ı	
143	2100	2/1	12.16'S	139°40'W		080			78.0	1011	0 1	4,8	3		080		5	0.18	
144	0000	2/2	11.55'S	139°39'W		090			8.5	1010	0.3		9		080		5.9	0.20	
145	0300	2/2	11°37'S	139°42'W	84.0	090		_		1010	0.1	∞	2		090		5	0.18	
146	0090	2/2	11°16'S			090				1011	03	∞	~		090		6.0	0.19	
147	0060	2/2	11.02'S	139°41'W		090				1012	0 1	∞	2		090		35,84	0.07	
148	1200	2/2	10.43'S	139°39'W	84.0	070			77.0	1010	02	∞	2		070		5	0.22	
149	1500	2/2	10.27'S	139°38'W		070	11	2, 1	77.3	1011	0.2	∞	2	6 2		4	5.8	0.20	
150	1800	2/2	10.02'S	139°39'W		020	12	4.0		1012	03	4, 8	33				00	0.30	
151	2100	2/2	8,98,60	139°40'W	83,7	080	14	2	76.5	1012	15	4.	7		050		35.81	ı	
152	0000	2/3	09.13'S	139°40'W	84.3	0.40	13	7	8.6	1010	02	8,2,6,5	4				35.73	1	
153	1500	2/5	09.12.5		XXX	060	14	_	7.0	1011	0.1	1,8	2		060		1	ı	
154	1800	5/2	09.12'S	140°03'W	83.0	100	18	82.7 76	76.4	1012	00	8, 1	3	8	060		1	0.28	
155	2 1 0 0	2/2	09.12.8	140°30'W		080	16	9	7.8	1011	01		2				35.77	0.20	
156	0000	9/2	09.11'S	140 • 48 W	4.	060	2.1	0	7.3	1009	02		7				35.84	0.22	
157	0300	9/2	S.90.60	140°48'W	84.0	060	18	0.9	19.0	1009	03	1,8	3	9 3	060	3	35.86	0.19	
158	0090	9/2	S.20.60		3	060	20	3,4		1010	02	×	×		100		35.75	0.10	
159	0060	9/7	S.20.60	.21	4.	060	18	4.0	78.2	1010	00	×	×				35.84	0.23	
160	1200	9/2	8180.60	141°32°W		110	18	3		1010	02	8, 1	3		100		35.81	0.23	
161	1500	2/6	\$,80.60	141°48'W		130	19	~	77.8	1010	0.1	1,8	3		130		35.86	0.17	
162	1815	9/2	S,20.60	142°12'W		060	17	44	8.5	1012	03	8	4		100		35,79	0.20	
163	2100	9/7	8,80,60	142°30'W	84.3	100	13	85.6 78	78.5	1011	0.1	00	2	7 3		3	35.79	0.11	
164	0000	2/1	5,90.60	142°55'W		100	16	0	7.2	1008	01	8	23				35.75	0.30	
165	0300	2/1	09.12.8	25		100	16	0	8, 1	1008	02	∞	3				5.	0.20	
166	0090	2/1	09.13.8	- 1	84.1	100	16	4	77.3	1010	00	×	×				35.71	0.19	
167	0060	2/1	09.14'S	2		060	14	0	7.3	1010	0.0	×	×				5.	0.30	
168	1200	2/1	09.15'S	142°26'W		060	14	3, 5	7.3	1010	00	×	×				5.6	0.22	
169	1500	2/1	8,19,60	142 • 04 · W	83.7	060	20	8		1010	02	1,8	3				35.77	0.22	
170	1800	2/7	09*15'S	141°43'W	33	100	2.1	4.2 7	7.6	1010	20	œ	3		060		5.7	C1	
171	2 100	2/7	09.14'S	141°24'W		100	18	2	7.7	1008	01	8.1	П	7 4	060		35.77	0.17	
172	0000	8/2	09.12'S	141°16'W		080	18	3	8.8	1006	03	∞	4	7 4	060		5.	0.19	
173	0300	2/8	09.12'S	141°00'W		060	18	00	8, 3	1007	02	00	4		060		5	0.11	
174	0090	2/8	09.13.8	140°41'W	83.7	060	16	83.7 77	77.7	1008	00	×	×	7 4	060	4	35.88	0.05	
175	0060	2/8	09.14'S	140°24'W		060	16	0	8,5	1009	00	×	×		060		5.	0.40	

Table 3. --Observations at bathythermograph lowerings, Hugh M. Smith cruise 43 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

		. ;																																			
30	.iinc	PO4-P, μg at./L.	0.13	0.17	0.30	ı	0.38	0.18	0.33	.3	0.39	0.35	0.14	1	0.13	0.12	0.43	0.18	0.26	0.40	0.13	0.24	0.21	0.43	0.23	0.21	0.20	0.18	0.19	1	1	0.22	1	0.45		0.41	ı
70	ouri.	sal.,	35.84	35.77	35.79		35.79	īΟ.	υĊ.	35.79	ທີ	ις.	ιĊ.	υ.	5.6	35.59	ۍ ت	35.50	'	ທໍ	ι.	'n	ທີ	Š.	35,77	35.77	ŗ.	35.79	35.81	35.81	ι	35.77	ı	35.77	1	35,73	ı
-		Amt.	4	₩	3	3	_	4,	4,	3	3	3	3	~	~	3	~	~	3	3	3	3	3	3	3	3	~	3	3	3	3	3	3	3	3	3	3
Swell	-	Dir.	1				080	080	080	080	080	020	080	020	090	090	080	080	080	110	060	060	060	060	060	060	060	060	060	090	090	080	070	020	060	080	090
-	_	592 D •	1			2 0				3 0															2					3 (4	
χ ₂ .	_	Visib	1			2		8	00	7			2					7	7	7	7	7	2	7	2	7	7	9	7	7	9	9	9	2	7	2	2
H	T		_	-0			-0				Ų	¥	- 1	0	- 1	_	- 1	~	¥	¥	2	2	_	~	9	m	×	54	ന	3	*	×	×	#	01	_	П
ds	-	Cover	<u> </u>	(1)	4	3	(C)	пU	тU	4	^		2	ų.	2	_	2	(*1	^		[~	1-		V-1	9	.,			ω	,	,		, ,	4	7		
Clouds		Type	8,3	œ	œ	00	00	œ	œ	œ	×	×	\$	œ	œ	œ	8	1,8	×	×	4,8	80	8		6,8	6.8	×	×		8.6	×	×	×	00	∞	00	00
	Wes	ther	00	02	0.2	0 1	02	03	02	02	02	00	0.1	03	02	0.1	02	03	80	00	03	03	0.1	15	13	0 1	00	00	0.1	0.1	01	00	02	03	0.1	0.1	01
	Baro-	meter, mb.	1008	1009	1009	1010	1010	1008	1006	1007	1009	1009	1008	1010	1011	1010	1008	1008	1010	1010	1009	1010	1012	1011	1009	1010	1011	1011	1010	1003	1008	1008	1008	1008	1009	1008	1006
mp.	T	Wet y	77.5	77.0	77.2	77.3	77.4	79.3	78.0	78.1	77.9	78.0	77.6	78.2	78.6	78.5	78.7	79.0						78.7	78.8	79.5	78.3	77 2						77.2		77.0	76.5
Air temp.		Dry bulb,		00	ın	0			6.5	0		0	9	8	84.4	85.8	85.0	84.0					84.5		83, 5	3	83.0	83 7	3	2 4	85.0	85.0	83,3	83.1	84.3	85.0	85,3
		orce, kt.	17	8	12	15	17	18	17	16	2.0	16	13	14	18	14	12	15	13	13	10	12	14	11	14	14	13	1.2	1 1	16	5 7	17	17	22	19	22	17
Wind		Dir., F	110	080	0.20	0.70	080	000	080	080	070	090	070	070	060	060	060	080	110	110	110	110	080	100	100	130	110	110	070	040	020	080	020	060	060	100	080
	Bkt.	:		_	_	_	83.2	α π		7. 2. 7	. ~		3	82.8	82.8		33, 3		. ~				83.2	. ~	83.7	4.	5	д	י ה ה ה	י ה ה ה	24.0	24.2	03.00	00	83, 7	83.6	83.7
-	_	a)	4																																		
		Longitud	140.041	120 06 W	120 28 W	130.401	139°40'W	12004013	2 7 0	_		139.3917	139°40'W	~	139°36'W	139°28'W	139°44'W	139.501	130.4811	130-4317	139.381	130 3417	139 3411	139°34'V	139°36'W	139*39'1	139°40'W	120 • 4 1 (3	120 41	169 451	140.3011	140°56'1	141°09'1	14102313	141 3617	141°4911	142°02'W
		Latitude	1,1	09-10-3	09-13-5	S.71.60	08 46'S	000		07.5718	- [7	. 7.	36	~	561	05.5818	100	05.3718	- 50	27	1 2 7 0		200	07.5318	08 14'S	08.30'S	000	00.000	0.50.60	00 38.3	07.5615	07.3519	07 - 13 : 5	06.4815	06 -23'S	05.285
	_	Date, 1958	0,10	0/2	8/7	6/2	6/2		6/7	01/2	2/10	2/10	2/10	2/10	2/10	2/10	2/10	2/11	2/11	2/11	2/11	2/11	2/11	2/11	2/12	2/12	2/12		2/17	2/17	21/2	2/16	2/16	2/16	2/16	2/16	2/17
		Time, GCT		0021	1500	0061	1650		2100	0000	0000	0000	1200	1500	1800	2 100	2340	0400	0400	0000	1200	000	1800	2100	0000	0330	0090	0	0060	1200	0000		1200	1500	0001	2100	0000
		Ser. No.		9/1	177	8/1	1.79) (181	182	185	104	186	187	188	180	190	-	191	196	193	174	195	107	197	199	200		107	707	502	407 100	502	200	000	007	210

Table 3. --Observations at bathythermograph lowerings, Hugh M. Smith cruise 43 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

1958						Bkt.	Wind	pq	0	mp.	Baro-		Clouds		τελ		Swell	Surf	Surf.	
0.000		Time, GCT	Date, 1958	Latitude	ude	temp.,	Dir., T.	Force, kt.			meter, mb.	Wea- ther							1 3	
1200 2/17 04-35/5 412-75/W 82.8 130 18 83.7 77.8 1009 0.2 X X 6 4 090 3 361 1200 2/17 04-35/5 142-75/W 82.8 130 14 82.5 77.2 1008 0.2 X X 6 4 090 3 361 1200 2/17 04-35/5 143-75/W 82.8 100 17 82.5 77.2 1008 0.2 X X 5 6 4 090 3 361 1200 2/17 03-40/5 143-75/W 82.8 100 17 85.8 77.8 1000 0.1 0.4,8 2.7 3 0.0 3 352 1200 2/18 02-57/5 143-59/W 82.8 100 17 85.8 78.8 100 0.4,8 2.7 3 0.0 3 364 1200 2/18 02-57/5 144-59/W 82.8 100 15 84.6 78.4 1007 0.1 X 5 8.0 3 364 1200 2/18 02-57/5 144-59/W 82.8 100 15 84.6 77.4 1009 0.1 X X 5 3 0.0 1200 2/18 02-57/5 144-59/W 82.2 110 15 84.6 77.4 1009 0.1 X X 5 3 0.0 1200 2/18 07-50/5 144-59/W 82.2 110 14 82.2 77.7 1008 0.0 X X 5 3 0.0 1200 2/18 07-50/5 144-59/W 82.2 100 14 82.2 77.7 1008 0.0 X X 5 3 0.0 1200 2/18 00-50/5 144-59/W 82.2 100 14 82.2 77.7 1008 0.0 X X 5 3 0.0 1200 2/18 00-50/5 144-59/W 82.2 100 14 82.2 77.7 1008 0.0 X X 5 3 0.0 1200 2/18 00-50/5 144-59/W 82.2 100 14 82.2 77.7 1008 0.0 X X 5 4 0.0 3 34 1200 2/18 00-50/5 144-59/W 82.2 100 18 82.5 77.7 1008 0.0 X X 5 4 0.0 3 34 1200 2/18 00-50/5 144-59/W 82.2 100 18 82.5 77.7 1008 0.0 X X 5 4 0.0 3 34 1200 2/19 00-57/W 145-59/W 82.2 100 18 82.5 77.7 1008 0.0 X X 5 4 0.0 3 34 1200 2/19 00-57/W 145-59/W 82.8 100 14 86.2 79.0 1010 0.0	1 1	0300	2/17	35	10		080	15	5.4	77,3	1006	02	∞	_	7			5.	0.36	
1,000 2/17 04-76's 42-78's 8-2.8 130 14 84-0 77.8 1009 00 0.8 7 6 4 0.90 3 35.51 1500 2/17 04-76's 142-76's 8-2.8 110 15 82-5 17-2 1008 0.3 0.8 7 6 3 0.9 3 35.51 1000 2/17 04-76's 143-76's 8-2.8 110 15 8-2.5 17-2 1008 0.3 0.8 7 6 3 0.9 3 35.51 1000 2/18 02-56's 143-46's 8-2.8 110 15 8-2.5 17-2 1009 0.1 0.4.8 2 7 7 100 3 35.48 1000 2/18 02-56's 143-46's 8-2.8 110 15 8-2.5 17-2 1009 0.1 0.4.8 2 7 7 100 3 35.48 1000 2/18 02-56's 144-76's 8-2.8 110 15 8-2.5 17-2 1009 0.1 0.4.8 2 7 7 100 3 35.48 1000 2/18 02-56's 144-76's 8-2.7 110 15 8-2.7 100 0.1 8 1 7 3 0.0 3 35.43 1000 141-5 144-76's 8-2.7 110 15 8-2.0 17-2 1008 0.1 8 1 7 3 0.0 3 35.43 1000 144-55's 144-76's 8-2.7 120 144-56's 144-76's 8-2.7 120 144-56's 144-76's 8-2.7 120 144-56's 144-76's 8-2.7 120 144-56's	2	0090	2/17	.16	10	_	060	18	3, 7	77.0	1008	02	×	×	9			ı	ı	
170 2/17 04-06/5 143-05/W 82.8 100 17 82.5 77.2 1008 02 02 03 0.8	3	0060	2/17	.53	00		130	14	4.0	77.8	1009	00	×	×	9			u)	0.30	
1500 2/17 03740°S 143720°W 82.7 110 15 82.8 77.6 1008 03 0.8 7 6 3 09 3 55.55 0300 2/18 03740°S 143720°W 82.9 100 17 84.5 77.8 1009 01 1.6	4	1200	2/17	30	0.1		100	17	2.5	77.2	1008	02	×	3	9			,	ı	
18.00 2/17 03°40'S 143°32'W 82.9 100 11 18 17 10 10 4.5 8 10 10 4.5 8 10 10 4.5 8 10 10 4.5 8 10 10 4.5 8 10 10 4.5 8 10 10 4.5 8 10 10 4.5 8 10 10 4.5 8 10 10 4.5 8 10 10 10 4.5 8 10 10 10 4.5 8 10 10 10 10 10 10 10	2	1500	2/17	90.			110	15	∞	77.6	1008	03	8.0	2	9			ιĊ.	0.49	
2100 2/17 03*215 143*34*W 82.9 100 17 85.8 78.5 1009 0.1 0,4,8 2 7 3 100 3 5-48 00000 2/18 02*2*55 144*0*0*W 82.7 1 100 1 8,4,5 1 0 3 5-48 0500 2/18 02*2*57 144*0*0*W 82.7 1 100 0 4,5,8 6 7 3 0 0500 2/18 01*4*1* 144*0*W 82.7 1 100 0 4,5,8 6 7 3 0 8 - 1 0 9 1 6 6 6 7 3 0 9 1 6 6 6 6 7 3 9 1 9 1 8 7 1 0 8 7 1 0 8 7 1 0 8 7 4 8 9	9	1830	2/17	401			130	13	ıΩ	77,8	1010	0.1	1,8	1	2			ı	ı	
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7 0300 2/19 00°57'N 145°46'W 82.5 080 18 83.7 78.5 1008 01 4.5,8 6 7 3 080 3 55.35 8 6 6 000 2/19 01°22'N 146°16'W 82.5 090 21 83.0 77.7 1009 01 X 2 6 4 090 3 - 1 8 1500 2/19 02°33'N 146°16'W 82.5 100 18 82.5 77.7 1009 01 X 2 6 4 090 3 - 1 8 1500 2/19 02°33'N 146°16'W 82.5 100 18 82.5 77.7 1009 00 X X 6 3 120 3 35.43 9 1500 2/19 03°56'N 146°51'W 82.8 100 17 84.8 79.0 1010 03 64,6 8 3 7 4 110 3 - 1 8 15.48 9 1 10 1 1 8 1 8 1 1 1 1 1 1 1 1 1 1 1 1	9	0000	2/19	00°31'N	~		100	15	~	79.4	1008	15	4,	2	9			ı		
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0000 2/20 03°50'N 147°02'W 83.8 100 14 86.2 79.8 1008 63 X 9 5 4 100 3 0300 2/20 04°15'N 147°12'W 83.2 090 17 80.0 78.0 1008 63 X 9 5 4 100 3 34.88 0600 2/20 04°40'N 147°23'W 82.7 100 09 80.6 76.8 1010 80 X X 5 4 100 3 0900 2/20 04°40'N 147°23'W 82.8 060 19 82.5 79.0 1010 01 X X 6 4 070 3 1200 2/20 05°24'N 147°38'W 82.8 070 19 82.5 78.5 1009 01 X X 6 4 070 3 1500 2/20 06°40'N 147°69'W 82.6 070 16 82.4 77.9 1010 00 X X X 6 4 070 3 1800 2/20 06°40'N 148°08'W 82.5 080 17 85.2 78.3 1012 02 8 3 7 4 070 3 0000 2/21 07°27'N 148°18'W 83.2 070 18 82.5 77.8 1010 01 4,6,9 3 7 4 070 3 0000 2/21 07°27'N 148°50'W 81.8 080 18 81.8 76.4 1012 01 X X 6 4 080 3 0000 2/21 08°10'N 148°50'W 81.8 080 18 81.8 76.4 1012 01 X X 6 4 080 3 0000 2/21 08°55'N 149°08'W 81.6 090 16 81.5 75.6 1012 01 X X 6 4 080 3 0000 2/21 08°55'N 149°08'W 81.6 090 16 81.5 75.6 1012 01 X X 6 4 080 3 0000 2/21 08°55'N 149°08'W 81.6 090 16 81.5 75.6 1012 01 X X 6 4 080 3 0000 2/21 08°55'N 149°08'W 81.6 090 16 81.5 75.6 1012 01 X X 6 4 080 3 0000 2/21 08°55'N 149°08'W 81.6 090 16 81.5 75.6 1012 01 X X 6 4 080 3 0000 2/21 08°55'N 149°08'W 81.6 090 16 18 81.5 75.6 1012 01 X X 6 4 080 3 0000 2/21 08°55'N 149°08'W 81.6 090 16 18 81.5 75.6 1012 01 X X 6 4 080 3 0000 2/21 08°55'N 149°08'W 81.6 090 16 16 81.5 75.6 1012 01 X X 6 4 080 3 0000 2/21 08°55'N 149°08'W 81.6 090 16 16 81.5 75.6 1012 01 X X 6 4 080 3 0000 2/21 08°55'N 149°08'W 81.6 090 16 16 81.5 75.6 1012 01 X X 6 4 080 3 0000 2/21 08°55'N 149°08'W 81.6 090 16 16 81.5 75.6 1012 01 X X 6 4 080 3 0000 2/21 08°55'N 149°08'W 81.6 090 16 16 81.5 75.6 1012 01 X X 6 4 080 3 0000 2/21 08°55'N 149°08'W 81.6 090 16 16 81.5 75.6 1012 01 X X 6 4 080 3 0000 2/21 08°55'N 149°08'W 81.6 090 16 16 81.5 75.6 1012 01 X X 6 4 080 3 0000 2/21 08°55'N 149°08'W 81.6 090 16 16 81.5 75.6 1012 012 012 012 012 012 012 012 012 01	2	2100	2/19	03°26'N	146°51'W		100	19	86,3		1010	15	4	2	7			35.10	0.28	
0300 2/20 04*15¹N 147*12¹W 83.2 090 17 80.0 78.0 1008 63 X 9 5 4 100 3 34.88 0600 2/20 04*40¹N 147*23¹W 82.7 100 09 80.6 76.8 1010 80 X X 5 4 100 3 - 0900 2/20 04*40¹N 147*28¹W 82.8 060 19 82.5 79.0 1010 01 X X 6 4 070 3 - 1200 2/20 05*24¹N 147*38¹W 82.8 060 19 82.5 79.0 1010 01 X X 6 4 070 3 - 1500 2/20 05*24¹N 147*38¹W 82.6 070 16 82.4 77.9 1010 00 X X X 6 4 070 3 - 1800 2/20 06*15¹N 147*59¹W 82.7 070 16 83.6 78.4 1011 03 2.8.9 3 7 4 070 3 - 2100 2/20 06*40¹N 148*08¹W 83.2 070 18 82.5 77.8 1010 03 8 7 7 4 070 3 - 0000 2/21 07*27¹N 148*27³W 83.2 070 18 82.5 77.8 1010 01 4,6.9 3 7 4 070 3 - 0000 2/21 07*27¹N 148*27³W 82.1 080 20 82.8 76.5 1012 00 X X X 6 4 080 3 - 0000 2/21 07*27¹N 148*50¹W 81.8 080 16 81.5 75.6 1012 01 X Z 6 4 080 3 - 1200 2/21 08*35¹N 149*08¹W 81.6 090 16 81.5 75.6 1012 01 X X 6 4 080 3 -	3	0000	2/20	03°50'N	147°02'W	3	100	14	86.2		1008	02		7	2			1		
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1200 2/20 05°24'N 147°38'W 82.8 070 19 82.5 78.5 1009 01 X 2 6 4 080 3 1500 2/20 05°50'N 147°49'W 82.6 070 16 82.4 77.9 1010 00 X X X 6 4 070 3 1800 2/20 06°15'N 148°08'W 82.7 070 16 83.6 78.4 1011 03 2.8.9 3 7 4 070 3 2100 2/20 06°40'N 148°18'W 83.2 070 18 82.5 77.8 1010 03 8 7 7 4 070 3 0300 2/21 07°27'N 148°27'W 83.2 070 18 83.6 78.5 1010 01 4,6,9 3 7 4 070 3 0600 2/21 07°49'N 148°37'W 82.1 080 20 82.8 76.5 1012 00 X X X 6 4 080 3 0900 2/21 08°10'N 148°50'W 81.8 080 16 81.5 75.6 1012 01 X 2 6 4 080 3	9	0060	2/20	04.29'N	ന		090	19	82.5	19.0	1010	0 1	×	×	9			1	1	
1500 2/20 05°50'N 147°49'W 82.6 070 16 82.4 77.9 1010 00 X X 6 4 070 3 1800 2/20 06°15'N 147°59'W 82.7 070 16 83.6 78.4 1011 03 2.8.9 3 7 4 070 3 2100 2/20 06°40'N 148°08'W 82.6 080 17 85.2 78.3 1012 02 8 3 7 4 070 3 1800 2/21 07°04'N 148°18'W 83.2 070 18 82.5 77.8 1010 03 8 7 7 7 4 070 3 0300 2/21 07°27'N 148°27'W 83.2 080 14 83.6 78.5 1010 01 4,6,9 3 7 4 070 3 0600 2/21 07°49'N 148°37'W 82.1 080 20 82.8 76.5 1012 00 X X K 6 4 080 3 0900 2/21 08°10'N 148°50'W 81.8 080 18 81.8 76.4 1012 01 X 2 6 4 080 3 1200 2/21 08°35'N 149°08'W 81.6 090 16 81.5 75.6 1012 01 X 2 6 4 080 3	7	1200	2/20	05°24'N	ഹ		020	19		78,5	1009	01	×	2	9				ı	
1800 2/20 06*15¹N 147°59¹W 82.7 070 16 83.6 78.4 1011 03 2,8,9 3 7 4 070 3 2100 2/20 06*40¹N 148°08¹W 82.6 080 17 85.2 78.3 1012 02 8 3 7 4 070 3 2100 2/21 07°04¹N 148°18¹W 83.2 070 18 82.5 77.8 1010 03 8 7 7 4 070 3 0300 2/21 07°27¹N 148°27¹W 83.2 080 14 83.6 78.5 1010 01 4,6,9 3 7 4 070 3 0600 2/21 07°49¹N 148°37¹W 82.1 080 20 82.8 76.5 1012 00 X X 6 4 080 3 0900 2/21 08°10¹N 148°50¹W 81.8 080 16 81.5 75.6 1012 01 X 2 6 4 080 3 1200 2/21 08°35¹N 149°08¹W 81.6 090 16 81.5 75.6 1012 01 X 2 6 4 080 3	00	1500	2/20	N.05.50	147°49'W		010	16		4.22	1010	00		×	9			•	ı	
2100 2/20 06*40'N 148*08'W 82,6 080 17 85,2 78,3 1012 02 8 3 7 4 070 3 3 0000 2/21 07*04'N 148*18'W 83,2 070 18 82.5 77,8 1010 03 8 7 7 4 070 3 0300 2/21 07*27'N 148*27'W 83,2 080 14 83.6 78,5 1010 01 4,6,9 3 7 4 070 3 0600 2/21 07*49'N 148*37'W 82,1 080 20 82,8 76,5 1012 00 X X 6 4 080 3 0900 2/21 08*10'N 148*50'W 81,8 080 18 81,8 76,4 1012 01 8 2 6 4 080 3 1200 2/21 08*35'N 149*08'W 81,6 090 16 81,5 75,6 1012 01 X 2 6 4 080 3	6	1800	2/20	06°15'N	147°59'W		010	16	3	8	1011	03	φ.	3	2			1	ı	
0000 2/21 07°04'N 148°18'W 83.2 070 18 82.5 77.8 1010 03 8 7 7 4 070 3 0300 2/21 07°27'N 148°27'W 83.2 080 14 83.6 78.5 1010 01 4,6,9 3 7 4 070 3 0600 2/21 07°49'N 148°37'W 82.1 080 20 82.8 76.5 1012 00 X X 6 4 080 3 0900 2/21 08°10'N 148°50'W 81.8 080 18 81.8 76.4 1012 01 X 2 6 4 080 3 1200 2/21 08°35'N 149°08'W 81.6 090 16 81.5 75.6 1012 01 X 2 6 4 080 3	0	2100	2/20	06°40'N	148°08'W		080	17	υ°		1012	0.5	∞	m	7			•	ŧ	
0300 2/21 07°27'N 148°27'W 83,2 080 14 83,6 78,5 1010 01 4,6,9 3 7 4 070 3 0600 2/21 07°49'N 148°37'W 82,1 080 20 82,8 76,5 1012 00 X X 6 4 080 3 0900 2/21 08°10'N 148°50'W 81,8 080 18 81,8 76,4 1012 01 8 2 6 4 080 3 1200 2/21 08°35'N 149°08'W 81,6 090 16 81,5 75,6 1012 01 X 2 6 4 080 3	_	0000	2/21	07°04'N	ഹ	83.2	020	18	82.5	77.8	1010	03	80	2	2			1	٠	
0600 2/21 07•49'N 148°37'W 82.1 080 20 82.8 76.5 1012 00 X X 6 4 080 3 0900 2/21 08°10'N 148°50'W 81.8 080 18 81.8 76.4 1012 01 8 2 6 4 080 3 1200 2/21 08°35'N 149°08'W 81.6 090 16 81.5 75.6 1012 01 X 2 6 4 080 3	2	0300	2/21	07°27'N		83,2	080	14	9.		1010	0.1	9	3	7			ı	1	
0900 2/21 08*10'N 148*50'W 81,8 080 18 81,8 76,4 1012 01 8 2 6 4 080 3 1200 2/21 08*35'N 149*08'W 81,6 090 16 81,5 75,6 1012 01 X 2 6 4 080 3	3	0090	2/21	07.49'N	148°37'W	82.1	080	20	00		1012	00		×	9			1	1	
1200 2/21 08*35'N 149*08'W 81.6 090 16 81.5 75.6 1012 01 X 2 6 4 080	4	0060	2/21	08°10'N	148°50'W		080	18		9	1012	0.1	8	2	9			1	•	
	5	1200	2/21	08°35'N	149°08'W		060	16	÷	75.6	1012	0.1	×	2	9			•	١	

Table 3. --Observations at bathythermograph lowerings, Hugh M. Smith cruise 43 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont¹d)

_																				
Surf.		í	1	ı	ι	1	ı	ı	í	ı	í	ſ	ſ	ı	ı	í			ı	ı
Surf.	sal.,	1	1	ı	1	ı	ı	1	ı	ı	ı	ı	1	ı	ı	ι	1		ı	1
ell	Amt.	3	3	3	3	~	3	3	_	_	_	6	·		-	6	ζ.) (2	m
Swell	Dir.	080	0.40	080	080	080	080	090	020	080	060	XXX	290	290	270	XXX	300		070	040
	Sea	3	3	3	3	3	3	3	7	7	7	7	_	7	7	2	2	1	~	4
Υ31.	lidielV	9	7	7	7	∞	7	~	7	r~	9	9	7	2	9	9	o) (œ	9
	Cover	×	7	2	1	2	×	×	2	2	2	×	2	3	П	×	4)	ᆉ	33
Clouds	Type	×	4,8	00	00	00	×	×	8, 1	00	×	×	8,4	1,8	×	×	α	2 4	4,6	×
	Wea- ther	00	02	02	0.1	0.5	00	00	0.1	02	02	00	0.1	0.1	02	00	03	70	01	02
200			1014	1015	1012	1012	1014	1015	1016	1014	1015	1015	1017	1016	1016	1015	101	101	1016	1018
Air temp.	Dry Wet pulb,	75.8	75.6	76, 1	76.5	6.92	76.2	74.7	74.7	74.2	74.7	73.5	73,3	72.5	72.0	70.5				69.4
Air to		81.0	82.6	83.7	84.0	84.0	82.2	79.0	80.4	80.2	80.8	78.8	77.2	78.0	77.0	0.97	ŗ	7.6/	76.0	74.0
pu	Force, kt.	7.	15	17	14	13	17	12	11	20	05	04	90	12	11	11		10	14	19
Wind	Dir.,	100	060	060	060	100	100	090	100	080	080	020	230	240	260	310		340	070	050
	bkt. temp.,	0 18	81.3	81.0	81.8	81.6	80.0	78.3	78.0	79.0	79.4	78,4	77.9	77.5	77.1	0.97	ì	76.2	77.0	76.3
	Longitude	140000011	149 20 W	149°56'W	150°10'W	150°26'W	150°42'W	151°01'W	151°26'W	151°57'W	152°31'W	153°01'W	153°36'W	154°12'W	154°52'W	155°25'W		155°58'W	156°291W	157°06'W
	Latitude	14.000	N. 20-60	N. 62 60	N 36 60	10°41'N	N140011	11.55 II	12°49'N	13°42'N	N'92.41	15°11'N	15°58'N	16°43'N	17°25'N	18°02'N		18°46'N	19°24'N	20°03'N
	Date, 1958		17/7	2/21	2/27	2/22	2 (2)	2/22	2/22	2/23	2/23	2/23	2/23	2/24	2/24	2/24		2/24	2/12	2/25
	Time, Date, GCT 1958	1	1500	1800	0000	0300	0.600	1300	1000	0000	0000	12.00	1800	0000	0090	1200		1800	0000	0090
	Ser. No.		246	7 4 7	2.4 c	250	1 7 0	167	767	257	25.5 25.5	256	257	258	259	260		261	262	263

Table 4. --Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956)

7	H 00		•	ı	ı	ı	1	1	•	ı	1	- 1	1	0.27	0.22	0.27	0.23	0.29	0.43	0.35	0.26	0.27	0.26	0.39	0.28	0.32	0.36	0.44	0.35	0.36	0.23	0.53	0.35	0.67	69.0	0.42
9		34.97	35.08	34.94	35.01	34.95	35.01	35.08	35.06	0	0	35.03	34.98	34.95	34.11	35.04	34.95	34.82	34.79	34.70	34.85	34.63	34.79	34.36	34.45	34,41	34.49	34,46	34.66	34.52	~	34.68	34.60	34.56	34.64	34.94
=	Amt.		П	П	П	_	_	П	p=4	-	7	1	Н	-	н	-	٦	г	П	3	3	~	3	3					4	4	4				3	1
Swell	Dir.	XXX	XXX	050	XXX	XXX	320	XXX	170	180	180	XXX	XXX	130	130	130	140	110	100	100	100	120	060	060	060	060	100	100	100	100	100	100	001	100	060	060
	Sea	2	2				2	П	m	П	н	Н	П	-	Н	2	2	2	2	3	4	4	ıU	'n	Ŋ			ιΩ	Ω	4	4	4	4		3	- 1
£	lidiaiV	o o	00	00	00	00	00	00	œ	00	00	∞	00	00	00	00	00	00	∞	∞	00	œ	00	œ	œ	_∞	œ	œ	œ	2	2	7	2	2	œ	∞
ds	Cover	×	×	Ŋ	rU	3	9	9	4	2	-	×	×	1	1	×	1	1	9	×	×	2	rC	×	×	2	2	-	×	∞	∞	×	×	_∞	9	×
Clouds	Type	×	×	4	4,8	4,8	9	4,6,8	6,	00	∞	×	×	∞	00	×	∞	∞	∞	×	×	∞	80	×	×	6,4	%	×	×	7,5	7,5	×	×	2	4,8	×
	Wea- ther	00	00	10	0.2	0.2	03	02	0.2	0.1	0.1	02	0.2	0.2	0.2	0.2	0.5	0.2	03	00	00	0.1	03	02	00	03	01	0.2	0.5	14	21	00	00	62	0.1	00
D 1	meter,	1016	1016	1015	1015	1015	1015	1016	1015	1014	1015	1015	1015	1016	1014	1017	9101	1017	1014		1015	1015	1012	1014	1012	1014	1010	1012	1010	1013	1010	1011	1009	1011	1008	1008
emp.	Wet bulb,		71.0								70.4								73.2					71.1											78.2	. 1
Air temp	Dry bulb,	73.1	74.9	74.5	3	74.1	73.0	75.8	76.1	75.0	75.0	74.3	74.5	75.7			6.		76.9		9	78.4	77.3	77.2	77.7	77.9	77.7	78.1		79.5		79.8	80.8	77.5	82.0	82.0
pr	Force, kt.	60	20	0.8	20	20	60	0.5	60	80	80	60	0.5	08	0.2	03	80	60	14	16	17	19	19	2.1	17	18	21	16	17	14	18	10	13	22	10	20
Wind	Dir., °T.	060	340	300	250	190	091	270	280	170	140	150	140	140	120	130	060	100	080	020	080	080	080	080	090	080	020	010	080	020	020	060	080	120	100	100
14 A	temp.,	4.	75.1	4.	4	3.	3	5	4.		υ,	δ.	74.4	5	9		5.	'n	76.2		υ.			77.2				œ		œ			$\vec{-}$	Ξ.	82.9	2.
	Longitude	157°46'W	157°47'W	157°45'W	157°55'W	157°56'W	157°56'W	158°24'W	158°42'W		158°59'W	158°40'W	158°17'W	157°33'W	157°17'W	156°48'W	156°23'W	156°01'W	155°40'W	155°20'W	155°02'W	154°44'W	154°25'W	I54°05°W	153°46'W	153°26'W	153.09'W	152°54'W	152°34'W	152°14'W	151°53'W	151°32'W	151°01'W	150°28'W	150°04'W	150°06¹W
	Latitude	21°36'N	21°59'N	22°20'N	22°20'N	22.03'N	21°49'N	21°39'N	21°39'N	21°38'N	21°25¹N	21°24'N	21.25'N	20°40'N	N, 55.61	N,01.61	18°30'N	17°50'N	17°10'N	0	15°50'N	15°13 ⁴ N	14°34'N	13°50'N	13°10'N	12.28tN	11°51'N	11°11'N	N,62.0I	09°47¹N	N,10.60				N.8I.90	1
	Date, 1958		2/8	2/8	2/8	2/8	8/2	2/8	5/6	6/2	6/2	5/9	6/2	6/2	2/10	2/10	2/10	2/10	2/11	2/11	2/11	2/11	2/12	2/12	2/12	2/12	2/13	2/13	2/13	2/13	2/14	2/14	2/14	2/14	2/15	2/15
	Time, GCT	0725	1005	1245	1400	1600	1825	2200	0000	0230	0405	0625	0855	1800	0000	0090	1200	1800	0000	0090	1200	1800	0000	0090	1200	1800	0000	0090	1200	1800	0000	0090	1200	1800	0000	0090
	Ser.	1	2	3	4	ıÜ	9	2	00	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28	53	30	31	32	33	34	35

Table 4. .-Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont⁴d)

	Surf. PO ₄ -P,	µ8 al. / 1.	0.61	1	0.55	1	0.54	,	09.0	ι	0.46	ı	0.56	1	0.31	ı	0,44			0.54	ı	0.55	ı	0.51	1	69.0	1	0.58	ì	0.37	1	0.45	1	0.36	1	0.35	1	0.44
	sal.,		35.11	1	35.09	1	35.22	ŧ	35.12	ı	35.07	ı	35.10	ı	35.03	ı	35.09		ı	35.11	ι	35.17	ı	35.23	ı	35.34	ı	35.54	ı	35.47	ı	35.42	1	35.48	1	35.60	ı	35.44
11	Amt.		3	1	1	-	1	-	1	П	1	1	1	1	1	1	7		¬	7	4	4	4	3	4	-	1	1	1	_	Н	1	7	_	-	1	-	
Swell	Dir.	i	060	060	060	060	060	060	120	120	120	160	120	120	120	110	110		011	110	110	110	110	110	120	120	120	110	100	060	060	060	060	060	060	060	060	060
	Sea	;	~	3			3	2	7	3	3	3	3	3	3	7	7	(7	3	4	4	8	3	7	7	7	3	3	3	3	3	3	3	3	3	3	2
ελ	ilidia	ŢΛ	œ	œ	∞	6	6	6	6	2	6	6	6	6	6	8	œ	(00	9	œ	2	2	2	2	00	œ	œ	00	8	8	8	8	œ	∞	8	œ	8
18	Cover		×	2	2	1	×	63	9	2	×	3	-	1	×	2	2	(7	×	9	9	5	×	9	3	7	×	9	2	3	×	×	×	×	7	7	2
Clouds	Туре		×	8,4	80	œ	×	∞	- 00	8	×	9,8	8	00	×	8	∞		20	×	1,8	8,7	8,7	×	8,7	∞	80	×	6	. 00	00	×	×	×	×	80	8	6,8
	Wea-		00	03	0.1	0.5	0.2	0.2	03	2.1	0.2	0.2	0.2	0.2	00	0.2	0.2	(70	63	0 1	09	0 1	52	20	0.1	0.2	0.5	25	0.1	0.2	00	00	0.2	0.2	0.1	0.2	0.2
	Baro- meter,	.up.	1008	1009	1008	1006	1008	1007	1007	1005	1008	1008	1008	1006	1009	1010	1009	0	1009	1010	1009	1010	1008	1010	1010	1010	1008	1012	1012	1012	1010	1011	1012	1010	1012	1014	1013	1010
emp.	Wet bulb.			78.5		78.5		78.2	6	77.5	78.5		78.3			78.8	78.8		6.8/		78.3	78.9	71.3	78.8		79.1		78.8	78.2		79.0	78.8	78.1	78.0			77.9	
Air temp		°F.	81.0	82.8	85.5	84.0	81.9	82.2	ω.	0		81.8		82.0	82.4	82.9	84.0	(83.5		82.3	84.0	81.9	82.4	82.1	83.7	83.2	81.7	81.1	84.2			81.7	81.2	81.4	82.5	81.9	
72	[z-	KI.	80	12	11	20	11	10	10	10	14	16	11	12	11	10	11	ì	90	18	19	13	12	10	12	13	13	14	13	16	15	15	15	16	16	16	16	14
Wind	Dir.,	1.	060	060	060	060	100	110	110	110	130	160	130	120	110	110	110		130	110	110	110	110	100	120	120	120	100	110	060	060	090	090	020	020	020	090	090
	Bkt. temp.,	4		82.3				82.6		82.8	82.6	82.3		83.2		82.5			83.6	87.8	82.4	82.6	83.0	82.2	82.1		82.7		82.2	82.7	82.5	82.2	82.2	82.1	82.0	82.2	82.4	82.8
	Longitude		150°03'W	150°10'W	150°05'W	149°57'W	149°56'W	150°01'W	150°00'W	149°52'W	150°00'W	150°12'W	150°17'W	150°14'W	150°07'W	150°14'W	150°20'W		150°18'W	150°14'W	150°19'W	150°19'W	150°17'W	150°06'W	150°06'W	150°02'W	150°00'W	150°04'W	150°10'W	150°12'W	150°08'W	149°46'W	149°33'W	149°19'W	149°04'W		8	148°20'W
	Latitude		05°02'N	04°42'N	04°44'N	04°40'N	04°17¹N	03°55'N	03°52¹N	03°50'N	03°18'N	02°57'N	02°57'N	02°53'N	N,61.70	01°55'N	01°54'N	1	01°51'N	01°19'N	00°54'N	00°53'N	00°52¹N	00°27'N	N.90.00	00°11'N	N, 20.00	00°21'S	00°48'S	00°45'S	00°44'S	01.085	01°23'S	01°38'S	01°52'S	02.10'S	02°251S	02°39'S
	Date, 1958		2/15	2/15	2/15	2/16	2/16	2/16	2/16	2/17	2/17	2/17	2/17	2/18	2/18	2/18	2/18		5/19	2/19	2/19	2/19	2/20	2/20	2/20	2/20	2/21	2/21	2/21	2/21	2/22	2/22	2/22	2/22	2/22	2/22	2/22	2/23
	Time, GCT		1200	1700	2205	0225	0060	1655	2205	0020	0060	1650	2205	0040	0060	1647	2206		00 20	0060	1637	2203	0045	0060	1639	2200	0027	0060	1635	2200	0015	0090	0060	1200	1500	1800	2100	0000
	Ser.		36	37	38	39	40	14	42	43	44	45	46	47	48	49	50	1	51	55	53	54	55	99	57	58	59	09	61	62	63	64	65	99	29	89	69	20

Table 4..-Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Surf	РО4-Р, µg at./L.	1	0.35	,	0.41	ı	0.36	ı	0.80	ě	0.34	1	0.31	ı	0.29		0.51	ı	,	ı	0.38	,	0.35	1	0.36		0.35	0.35		0.35		1	0.43	0.43	ı	
Surf		,	35.56	ı	35.51	1	35.65	1	35.46	ı	35.63	1	35.59	- 1	35.66	ı	35.81	1	35.80	1	35.91	ı	35.88	,	35.88	,	35.91	35.90	ı	35.93	ı	,	35.76	35.83	ı	
110	Amt.		П	Н	П	7	1	1	,	-	н	1	ı	П	1	1	1	1	П	П	П	1	-	г	П	П	П	П	7	1	1	7	1	1	П	-
Swell	Dir.	060	060	060	060	060	060	080	080	080	080	080	080	080	080	090	090	090	090	090	090	090	090	090	090	230	320	030	030	030	030	090	090	030	080	060
	Sea	3	2	7	2	2	2	2	2	2	2	2	2	2	2	2	7	2	2	7	7	-		Н	_	2	2	2	7	7	3	2	2	7	3	3
īţ	lidieiV	∞	00	00	00	00	00	∞	œ	∞	00	00	00	œ	∞	8	00	00	œ	80	∞	00	000	œ	œ	œ	∞	œ	œ	œ	∞	∞	00	œ	œ	∞
ds	Cover	3	×	×	×	×	9	9	9	3	×	1	×	2	2	3	4	2	×	×	×	2	2	7	2	2	3	2	7	9	Z.	4	4	Н	2	2
Clouds	Type	4,8	×	×	×	×	8,9	6,8	6,8,9	∞	×	00	×	80	∞	∞	∞	80	×	×	×	00	6,8	9	4,8	∞	∞	∞	4,8	∞	4,8	∞	80	∞	∞	00
	Wea-	03	00	00	00	00	03	02	15	01	00	0.1	00	0.1	0.2	03	03	0.1	00	02	00	00	01	02	02	01	02	01	02	03	03	03	02	01	03	01
Baro-	meter,	1010	1012	1013	1011	1012	1014	1013	1010	1010	1012	1012	1010	1010	1012	1011	1009	1010	1012	1012	1011	1011	1012	1012	1010	1010	1009	1008	1007	1008	1010	1011	1010	1010	1011	1012
emp.	Wet bulb,	77.8		78.3	75.9	77.2	78.2	78.3	78.5	78.2	78.0	78.3	78.3		78.5	78.8	78.4	77.5	6.77		77.1	76.3	76.4	77.3	77.3			29.62		78.3		78.1		78.2	77.0	77.2
Air temp	Dry bulb, °F.			. 2	. 2	. 7	0	82.1	83.0	82.4					82.7		82.4			81.5		82.1	83.9	86.1				85.6	84.7	86,1					83.8	
pq	Force, kt.	16	10	10	13	60	12	80	90	0.8	60	10	13	10	11	12	12	13	11	11	20	90	90	90	90	0.2	0.7	90	60	0.2	10	16	16	0.7	17	17
Wind	Dir., °T.	090	090	020	020	050	020	040	040	040	040	030	030	030	040	030	040	040	040	030	030	030	040	020	020	360	030	320	340	350	020	090	090	040	080	060
Bkt.	temp., F.	5	82.6			82.5				83.6		3.	83.2	3.	83.3	84.0	84.4	84.1	84.0	84.1	84.1	84.1	83.9	85.0	4.	ů.	86.0	4.	υ.	85.1	84.1	84.5	84.5	4.	84.0	3,
	Longitude	148°00'W	147°40¹W	147°23¹W	147°02¹W	146°42°W	146°22¹W	0.5	145°42¹W	145°22'W	145°02'W	144°41'W	144°20'W	143°58'W			142°53'W		142°10'W	141°50'W	141°29'W	141°09'W			140°18'W		140°36'W		Pa	139°18'W	139°01'W	138°52¹W	138°51'W	139°48'W		
	Latitude	02°52'S	03.0518	03.1518	03.2845	03.39'S	03°52'S	04°09¹S	04°26'S	04°42'S	04°59'S	S,91°50	05°35¹S	05°52'S	S, 20.90	06°22'S	06°40'S	S125.90	07 • 12 tS	07.2815	07°43¹S	07*5815	08°14'S	08°34'S	08.5215	08°47'S	08°34'S	07°42'S	07°57'S	08°41'S	09°22'S	10.0115	10.05'S	S198.60	S,58.60	09°35'S
	Date, 1958	2/23	2/23	2/23	2/23	2/23	2/23	2/23	2/24	2/24	2/24	2/24	2/24	2/24	2/24	2/24	2/25	2/25	2/25	2/25	2/25	2/25	2/25	2/25	2/26	2/27	2/27	2/28	3/1	3/1	3/2	3/3	3/3	3/5	3/6	3/6
	Time,	0300	0090	0060	1200	1500	1800	2100	0000	0300	0090	0060	1200	1500	1800	2100	0000	0300	0090	0060	1200	1500	1800	2100	0000	1925	2200	2155	0107	2200	2037	2037	2150	2200	1700	1900
	Ser.	7.1	72	73	74	75	92	22	78	4	80	81	82	83	84	85	98	87	88	89	06	91	92	93	94	95	96	26	86	66	100	101	102	103	104	105

Table 4. --Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

3	H 38		ı	ł	ı		ı	1	ı	ı	1	1	1	1	ı	4	ı	1	1	ı	ı	1	ı	ı	ı	1	ı	1	1	1	ı	ì	ı	ı	ı	1
2	sal.,		35.97	ı	1	ı	ı	ı	ı	ı	1	ı	ı	ı	ι	ı	,	ı	ı	ı	ı	ı	1	ı	ì	ŧ	ı	1	ı	1	ı	ı	ı	1	ı	1
ell	Amt.]-	П	1	-	-	п	1	П	П	1	П	7	7	-	П	7	П	7	1	1	г	П	-	7	7	-	П	1	1	1	7	1	ı	1	-
Swell	Dir.	080	080	080	080	080	080	080	080	080	080	100	100	100	100	130	130	130	100	110	110	110	110	110	080	080	080	060	060	060	060	060	060	060	060	060
	Sea	m	3	3	3	3	3	3	3	7	7	3	3	3	7	7	2	2	2	7	2	7	2	2	2	2	3	3	2	2	3	3	33	3	3	3
ξą	Visibil	000	00	00	00	00	00	00	00	00	7	00	00	00	œ	00	00	00	00	œ	00	00	00	00	00	00	00	00	00	00	00	00	00	00	œ	80
ds	Cover	3	2	1	7	3	1	1	1	1	9	3	٣	×	×	7	rO	×	4	2	3	9	4	J.	'n	×	×	2	×	×	2	7	×	×	4	44
Clouds	Туре	8	00	8	00	∞	∞	00	00	00	4,9	∞0	00	×	×	8,9	8,9	×	00	9,8	∞	8 ,0	00	8,9	8,9,4	×	×	∞	×	×	∞	_∞	×	×	8,9	8,9
	Wea- ther	03	0.2	02	02	02	02	02	02	02	25	03	02	00	00	03	02	00	03	0.1	02	03	02	80	25	00	00	03	00	00	03	02	00	00	03	0.2
0,000	meter, mb.	1010	1008	1008	1008	1008	1009	1009	1008	1008	1008	1011	1008	1010	1010	1012	1009	1010	1010	1012	1011	1008	1010	1009	1010	1012	1012	1012	1013	1012	1014	1010	1012	1011	1014	1011
mp.	Wet bulb,	78.3	77.3	8.97	77.9	77.7		76.2	76.5	75.7		78.6	77.7		77.7	8.82	76.9	78.6	77.6	78.8	78.4	6.77	79.5	80.0	9.62	79.2	79.3	77.8	77.9		78.3	77.3	78.6		78.0	
Air temp.	Dry bulb,	85.5		85.5	84.4	83.0	83.7	83.4	83.6	83.1		85.2	84.8	84.0	82.0	82.0	83.7	83.3	82.8	84.3	84.2	84.7	85.6	7	83.9	84.1	83.5	84.9		83.8		84.4	84.6		83.9	4.
nd	Force, kt.	14	14	14	14	19	14	14	80	0.7	10	19	14	14	12	10	07	10	14	10	60	20	11	14	14	13	17	12	15	14	12	18	14	15	14	12
Wind	Dir.,	090	070	070	070	020	070	070	110	060	010	100	100	060	090	130	100	100	100	100	100	130	080	080	080	100	080	120	120	100	110	060	060	100	100	100
1 6	temp.,	84.1	84.3	84.4	84.2	84.0	84.0	84.0	83.9	84.2	83.5	84.3	84.8	84.0	84.5	84.4	84.6	84.8	84.5	84.5	84.8	85.0		٠,	85.0	84.0	84.0	84.1	83.9	84.1	84.0	84.7	84.5		84.3	
	Longitude	139°52¹W	139°51'W	139°51'W	139°50'W	139°51'W	139°51'W	139°51'W	139°51'W	139°51'W	139°49'W	141°36'W	142°16'W	142°48'W	143°24'W	144.00'W	144°31'W	145°11'W	145°47'W	146°22'W	146°39'W	147°12'W	147°54'W	147°56'W		148°44¹W	149°12¹W	149°14'W	148°42'W	148°08'W	147°35'W	147°01'W	146°23¹W	145°51'W	145°20'W	144°48'W
	Latitude	09*36†S	09°34'S	09°34'S	09°35'S	09.34'S	09°34'S	09°34'S	09°34'S	09.3415	09*34'S	10.1015	10.4215	11°14'S	11.46'S	12.19'S	12.52'S							14°57'S							15°44'S	15°16'S	14°48'S	14°13'S	13°42'S	13.09'S
	Date, 1958	3/6	3/6	3/7	3/7	3/7	3/7	3/7	3/7	3/7	3/7	3/10	3/11	3/11	3/11	3/11	3/12	3/12	3/12	3/12	3/12	3/12	3/13	3/13	3/15	3/15	3/15	3/20	3/20	3/20	3/20	3/21	3/21	3/21	3/21	3/22
	Time, GCT	2,100	2300	0100	0300	0200	0400	0060	1100	1300	1500	1800	0000	0090	1200	1800	0000	0090	1200	1800	2028	0000	1900	2200	0000	0090	1200	0000	0090	1200	1800	0000	0090	1200	1800	0000
	Ser.	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140

Table 4. --Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

	. a. ii																												_							
3			ı	ı	ı	ı	1	,	,	0.35	0.35	0.34	0.32	0.41	0.50	0.43	0.44	0.69	0.44	0.44	0.45	0.44		0.44			0.50					0.36	0.42	0.34	0.39	0.44
3,110		,	ı	ı	ı	ı	1		ı	35.87	10	5.8	8	5.7	5.	5.6	5.7	35.75	5.7	5.7	00		00	35.75	. 7	5.7	ω.	5.7	5.7	35.73	5.7	5.8	5.8	35.83	5.	5.8
11	Amt.	-	П	41	4	4	4	4	4	Н	٦	-	41	4	4	4	4	41	41	4	4	4	4	4	4	4	4	4	4	41	4	41	41	4	1	7
Swell	Dir.	060	060	060	060	060	060	060	060	110	100	100	100	100	100	100	100	060	060	060	060	060	060	060	060	060	060	060	060	060	060	060	060	060	080	080
	Sea	~	3							3		3	4	3	3	3	3	3	3	3	3	ć	3	33						3	3			3		
£11	[idia]	. ∞	00	œ	œ	œ	œ	œ	00	8	∞	00	2	2	2	2	00	00	∞	00	∞	2	2	2	2	2	00	8	8	œ	7	2	7	œ	8	œ
18	Cover	$\bigg]_{ imes}$	×	3	3	×	×	2	2	2	c,	ī.	2	×	×	×	×	9	3	5	41	×	×	×	×	7	2	n	7	2	×	Н	×	1	1	2
Clouds	Type	×	×	8,5	∞	×	×	80	∞	8	8	9	4	×	×	×	×	8	80	4,8		×	×	×	×	89	∞	∞o	∞o	∞	×	8	×	∞0	∞	8,1
	Wea-	00								3		02	15	00	00	00	00	0.2	01	03	0.2	0.0	50	80	00	03	0.2	0.2	0.2	0.2	00	0.2	00	0.1	02	0.2
Raro		1013	1011	1012	1010	1012	1010	1011	1008	1011	1012	1010	1008	1010	1012	1010	1010	1011	1012	1010	1009	1010	1012	1011	1010	1011	1012	1011	1009	1009	1011	1010	1010	1010	1010	1009
	1 -		2	6	80	∞.	.5		7	6.	80	4	0	-	0.	٠,	9	.5	7	6	6	6	80	.3	.7	-	ζ.	9.	6.	6	ń	2	6	S	7	4
temp.	y o ∘	12	7	7	7	77	22	78	7	2	7	7	2	7	92	17	7	3 77.	7	7	7			7	77			79	4		0 77.			9 77.		
Air	Dry bulb,	1 5	3	4.	5.	5.	4.	5.	4.	83.	ď	84.	84.	83.	84.	83.	82.	84.	86.	85.	84.	83.	80.	82.	82.	84.	85.	86.	85.	84.	84.	4.	5.	83.	5.	5
pq	Force kt.	14	20	15	16	14	20	17	18	60	14	60	19	0.8	60	10	10	60	80	08	60	10	11	60	12	12	14	13	14	15	14	91	14	11	12	13
Wind	Dir.,	120	100	060	060	120	110	110	100	110	120	100	140	180	080	080	060	080	110	060	080	080	080	080	020	080	020	080	100	060	100	060	060	080	060	100
Bkt	temp.,	84.4		84.1		84.4				83.8		4.	3.	3		3	3	83.8	3	4.	84.1	3	3.	83.5	3	3,	4.	4	4.	4.	4.		84.2	84.1	84.2	4.
	Longitude	144°16'W	143°47'W	143°16'W	142°40'W	142°09'W	141°36'W	141°04'W	140°36'W	139°36'W	139°20'W	138°58'W	138°42'W	138°24'W	138.06'W	137°50'W	137°34'W	137°14'W	136°56'W	136°36'W	136°15¹W	136°00'W	136°15'W	136°36'W	136°56'W	137°16'W	137°29'W	137°48'W	138°10'W	138°33'W	138°53'W	139°10'W	139°27'W	139°45'W	139°42'W	139°41'W
	Latitude	12°34'S	12.00 tS	11.28'S							S,II.60	S,01.60	09.1215	09°12¹S	S, II. 60	S.01.60	S,60.60	S120.60	S,01,60	09.1215	09.12'S	09.1218	09°11'S	S180.60	S, 20.60	S,50.60	S,00.60	S,00.60	09.04'S	S,60.60	S,60.60	S180.60	S180.60	S,90.60	08.4215	08.285
	Date, 1958	3/22	3/22	3/22	3/23	3/23	3/23	3/23	3/24	3/26	3/26	3/26	3/27	3/27	3/27	3/27	3/27	3/27	3/27	3/27	3/28	3/28	3/28	3/28	3/28	3/28	3/28	3/28	3/29	3/29	3/29	3/29	3/29	3/29	3/29	3/29
-	Time, GCT	0090	1200	1800	0000	0090	1200	1800	0000	1600	1900	2200	0100	0400	0020	1000	1300	1600	1900	2200	0100	0400	0090	0060	1200	1500	1833	2100	0000	0300	0090	0060	1200	1500	1836	2100
	No.	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175

Table 4. --Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

						Wind	 	Air te	temp.			Clouds	da	ſλ	-	Swell		\vdash	
					Bkt.					Baro-	11/22			iI.		-	T		Surf.
Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	temp.,	Dir., °T.	Force, kt.	Dry bulb,	Wet wet bulb,	meter, mb.	ther	Type	Cover	Visibi	Sea D •	Dir.	Amt.	sal.,	РО4-Р, µg at./L.
176	0117	3/30	08 04 15	139°46'W	84.6	060	12	٠.		1008	0.3	80	4	00		80	-	5.7	.3
177	0300	3/30	07.51'S	-	84.5	060	12	84.1	0.62	1008	0.2	00	3	00	2 0	080	_	35.76	0.44
178	0090	3/30	07°32'S		ហ	100	60			1010	00	×	×	00		080	_	5.7	9.
179	0060	3/30	07°14'S	-		060	60			1010	00	×	×	2	2 0	80	_	5.7	υ.
180	1200	3/30	S125.90		3	100	10			1009	00	×	×	7		∞	Н	5.6	r.
18	1500	3/30	06°40'S	139°42'W		100	12	2	78.4	1010	03	80	6	7	2 0	∞	7		
182	1800	3/30	06°23'S	_	83.3	060	14	83,3	79.2	1011	0.2	∞	4	∞	3 0	∞	П	5.5	0.54
183	2100	3/30	05°59'S	139°40'W		100	10	4.	79.3	1010	0.2	00	4	∞	3 0	∞	ч	5	
184	0000	3/31	05.4115	139°38'W	3	080	13	4.	0.62	1008	0.1	80	S	7		80	-	4.	
185	0300	3/31	05°27'S	139°39'W	3	060	12	3,	78.7	1010	15	9,4	9	7		80	-	5.4	
186	0090	3/31	05°44'S	139°40'W	3	110	12	3	78.6	1011	00	×	×	7		080	~	5.4	
187	0060	3/31	06.0215	139°39'W	3	110	12	2.	78.7	1012	00	×	×	8		∞	П		
188	1200	3/31	06°20'S	139°39'W	3	060	11	2.		1010	00	×	×	2		∞	_	5.5	
189	1500	3/31	90.36'S	139°39'W	3.	080	10	82.4		1011	0.2	8, 1	4	00		∞	٦	5.5	
190	1800	3/31	06°57'S	139°39'W	3	080	13	4.		1013	03	4,8	Ŋ	00	3 0	080	П	9.	
191	2 100	3/31	07.1815	W198.981	+	080	60	ω,		1012	02	4,8	3	00		080	-	7.	09.0
192	0000	4/1	S168.20	-	- -	040	13	3	00	1010	03	8,4	ıΩ	00	3 0	080	٦	5.7	0.61
193	0300	4/1	07°56'5	139°38'W	· ·	070	12	3		1010	0.2	∞	9	∞		080	-	5.7	0.35
194	0090	4/1	08,1045	139°44'W	-	020	60	3	9.	1012	00	×	×	7		080	7	δ.	0.37
195	0060	4/1	08°24'S	139°51'W	4	070	08	4.		1012	00	×	×	7		080	_	5.7	0.34
196	1200	4/1	08°38'S	139°57'W	84.3	090	60	83.5	78.1	1010	0.2	8	1	00	2 0	080	П	35.70	0.35
197	1500	4/3	S,80.60	139°40'W	4	070	13	2.	7	1010	00	80	5	00		00	4	ď.	0.41
198	1800	4/3	S180.60	140°02'W	4	080	14	3.	7.	1012	0.2	∞	1	œ		∞	-	. so	0.29
199	2100	4/3	S,60.60	140°26'W	4	100	60	ς,	7	1011	0.1	00	П	œ		∞	-		0.52
200	0031	4/4	09°11'S	140°42'W	'n	0.40	11	~		1008	0.5	∞	1	∞		080	ы	υ ∞	0.32
201	0300	4/4	8,01.60	140°54'W	85.4	350	0.5	9	78.2	1009	0.2	∞	2	∞		080	_	.0	
202	0090	4/4	S180.60	141°14'W	4	140	90	4	78.0	1011	0.2	80	2	2		080	1	00	
203	0060	4/4	S180.60	141°34'W	4	040	0.8	3	7	1012	0.3	8	9	00		080	7	9.0	
204	1200	4/4	S, 20.60	141°52'W	84.8	340	90	83.5	75.4	1010	0 1	00	-	2	7	080	_	35.86	0.33
205	1500	4/4	S120.60	142°09'W	4.	050	90	2	75.5	1010	0.2	∞	-	œ		080	-	ω. ∞	
206	1800	4/4	S120.60	142°32'W	4.	040	90	3	75.7	1012	0.2	00	-	00		080	П	က်	
207	2100	4/4	S180.60	142°54'W	S.	020	90	3	~	1012	03		33	00		080	-	5.9	
208	0000	4/5	S180.60	143°12'W	7	350	03	5	77.0	1010	03	8,1	J.	œ		080	-	5.9	
209	0300	4/5	S. L0.60	143°16'W		160	03	85.2	76.4	1008	0.5		S	00		080	-	ر ص	
210	0090	4/5	S150.60	142°58'W	6.	060	04	4.	9	1010	01	×	7	00		080	-	ν. ∞	

Table 4. --Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

		1																																		
Surf.	РО4-Р, µg at./L.	0.44	0.34	0.35	0.34	0.27	0.80	0.28	0.35	0.35	0.38							0.34								0.36		0.36			0.34				0.36	
Surf.		5	5.8	5.8	5.8	5	5.8	00	5.9	200	5.8	35.93	35.91	10	35.93	.0	.0	vo.	36.02		9	35.87	35,92	35.94	35.95	35.99	36.01	6.	6.	0.9	35.96	6.0	5.9	5.9	35.94	5.8
п	Amt.	-	7	7	-	-	-	-	7	I	7	ı	П	-	-	-	Н	н	Н	Н	41	7	П	П	-	Н	П	٦	-	-	-	1	-	-	-	Н
Swell	Dir.	080	080	080	080	080	090	090	090	090	090	090	090	090	090	090	020	020	020	020	140	140	071	120	150	150	150	150	150	150	150	051	091	150	150	120
-	Sea	1						7			7							7								2									7	
Κarı	[idiaiV	}								œ	2	2	00	00	ω	œ	ω	2	2	2	2	2	00	œ	2	2	7	œ	00	8	00	00	2	2	00	00
	Cover	2	4	3	3	2	2	2	2	2	2	1	ı	2	2	2	×	2	3	5	00	2	3	3	×	×	×	2	2	2	7	_	×	S	2	2
Clouds	Туре	4	8	8	80	80	80	∞	00	00	∞	00	8	80	89	8,5	×	4	×	4,8	7	7	8,4,2	80	×	×	×	00	2,8	8	80	80	×	8	00	œ
	Wea- ther	0.2	03	02	0.2	01	02	02	0.2	0.2	02	0.2	02	02	02	03	00	03	00	03	09	20	0.1	02	00	00	00	02	01	02	01	0.2	00	03	0.1	02
Baro-	meter, mb.	1010	1009	1010	1011	1010	1007	1001	1009	1010	1008	1008	1010	1008	1007	1008	1010	1010	1008	1010	1011	1010	1008	1008	1010	1011	1010	1010	1012	1010	1008	1009	1010	1011	1010	1010
mp.	Wet r	75.0	5.	5	6.	6.	2	5	5,	76.1	Š.	'n	-	2	2	2	7		6.		7	7	œ	2	2	8.72	2		9	œ					77.3	
Air temp	Dry bulb,	3.	٠i	οi	4	84.3	10	83.7	3,	82.0	82.4	2.	86.2	85.2	83.4	86.5	84.3	84.4	80.5			82.5	82.7	84.2	83.8	87.8	83.9	82.2	83.8	85.6	86.5	84.3	84.1	84.1	82.9	83.9
pι	Force, kt.	0.5	0.2	04	80	90	90	03	0.5	90	11	12	15	13	14	10	20	90	0.5	0.5	10	20	0.5	0.5	0.5	90	11	04	08	80	08	90	04	12	60	60
Wind	Dir., T.	060	080	090	020	040	090	040	150	020	020	030	030	030	360	330	350	320	070	040	080	020	060	0.00	110	060	060	030	090	090	040	040	020	090	020	020
Bkt.	temp., •F.	5.	4.	4.	4.	'n	6.	6.	'n	84.8	4.	4.	4.	84.7	84.8	85.0	85.0	84.4	84.2	84.1	84.0	4.	5	4.	4.	84.3	4.	4.	3	4.	5	5	ů.	84.8	84.4	84.4
	Longitude	142°44'W	142°28'W	142°10'W	141°50'W	141°29'W	141°08'W	140°46°W	140°28'W	140°13'W	139°57'W	139°40¹W	139°40'W	139°40'W	139°42'W	139°43'W	139°45'W	139°47'W	139°48'W	139°49'W	139°48'W	139°47¹W	139°46'W	139°46'W	139°43'W	139°43'W	139°41'W	139°40'W	139°41'W	139°42'W	139°42¹W	139°43'W	139°44'W	139°48'W	139°51'W	139°55'W
	Latitude	09*03'S	09.041S	S150.60	S:50.60	S,80.60	S,60.60	5,80.60	S160-60	8,01.60	09°12'S	S,91.60	8,98,60	S125.60	10.16'S	10.34'S	10.52'S	11.1215	11°28'S	11°44'S	12.04'S	12°24'S	12°44'S	12.5018	12°32'S	12°17'S	12.00'S	11°43'S	11.2318	11.0318	10°43¹S	10.225	10.0218	09.4218	09°24'S	S180.60
	Date, 1958	4/5	4/5	4/5	4/5	4/5	4/6	4/6	4/6	4/6	4/6	4/6	4/6	4/6	4/7	4/7	4/1	4/7	4/7	4/7	4/7	4/7	4/8	4/8	4/8	4/8	4/8	4/8	4/8	4/8	4/6	4/6	4/6	4/6	4/6	4/6
	Time, GCT	0060	1200	1500	1800	2100	0000	0300	0090	0060	1200	1500	1800	2100	0000	0300	0090	0060	1200	1500	1800	2100	0000	0300	0090	0060	1200	1500	1800	2100	0000	0300	0090	0060	1200	1500
	No.	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245

Table 4. --Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Surf.	4-P.		3	. 62	49	,	.49	41	. 50	58	1					,		,					0.50	,	0.50		0.47	1	0.63	ı	0.65	,	0.56	ı	.45	
Su	H 8H					ı			0	0	,		•			•	•	,	•	•	•	,										•			0	
Surf.		ı	35.92	S	5.9	t	35.87	35.99	9	35.95	ı	ŧ	ı	ı	ι	ı		ı	ı	1	4	1	35.94	ı	35.91	ı	35.88	ı	35.85	ı	35.57	ι	35.43		35.17	•
11	Amt.	7	1	1	_	П	4	4	4	Н	-	Н	П	_	Н	н	-	_	П	-	П	Н	-	-	1	П	7	П	7	_	-	Н	Н	I	Н	-
Swell	Dir.	010	010	010	090	090	100	060	080	090	090	020	090	090	090	090	090	9	090	080	080	080	090	020	020	020	0 2 0	070	070	060	100	100	100	060	060	060
	Sea		7				3		3								2							7		7	2							3		
££Y.	lidialV	00	00	00	00	00	œ	9	00	00	00	7	7	2	2	~	2	2	œ	00	00	œ	œ	œ	7	2	2	2	00	00	00	œ	00	00	00	∞
spr	Cover	2	3	3	4	6	2	00	2	2	3	9	×	×	×	×	×	×	2	Н	3	2	3	2	×	×	×	×	2	3	2	3	×	×	×	3
Clouds	Туре	80	80	6	00	∞	œ	7	00	∞	∞	7,4	×	×	×	×	×	×	9	∞	œ	∞	00	∞	×	×	×	×	80	80	00	00	×	×	×	00
	Wea- ther	0.2	0.2	14	03	02	01	09	03	0.1	02	25	00	00	80	00	0.0	00	0.1	02	03	0.1	03	02	00	00	00	00	02	03	02	02	00	09	00	03
Baro-	meter,	1010	1010	1009	1010	1009	1011	1012	1010	1012	1010	1010	1012	1013	1013	1012	1011	1012	1012	1013	1013	1012	1011	1011	1013	1012	1011	1011	1013	1012	1009	1009	1010	1010	1009	1009
mp.	Wet , bulb, °F.	79.5	79.3	78.0	8.77	9.77	76.2	XXX	77.3	6.62	0.62	78.3	6.77	77.1	78.5	78.0		77.0						8.62			79.3	00	79.1	0	81.4	0	6	6	78.1	- 1
Air temp.	Dry bulb,		9.78		85.4		83,5	\mathbb{R}	84.1	87.5	86.4	84.2	83.8	83.8	3,	3.		80.6	ij	3	85.1	86.1	œ	4.	84.4	83.9	84.4	83.3	84.5	9.98	84.3	83.5		82.3		. 1
p	Force, kt.	10	60	11	11	11	14	2.1	14	60	60	11	08	12	0.8	10	=	21	08	08	13	0.5	03	16	14	15	13	17	15	11	10	11	10	11	08	13
Wind	Dir.,	080	090	080	100	060	100	020	100	080	080	070	020	020	120	020	0.40	020	020	080	080	060	260	100	080	080	060	100	060	100	110	110	080	070	090	050
Bkt.	. :	5.	85.2	5.	5	S.		84.5	84.4	5	5	85.0	4.		4.	4.	84.6	4		4.	4	85.0	85.4	84.8	84.9	84.8	84.7	4	84.7			84.4		83.5		33
	Longitude	140°39'W	140°40'W	140°40'W	140°06'W	140°00'W	139°32'W	138°54'W	138°50'W	139°50'W	139°49¹W	139°49'W	139°48'W	139°50'W	139°53'W	139°52'W	W139°621W	-	139°52'W	139°51'W	139°51'W	139°52'W	140°22'W	140°38'W	140°50'W	140°58'W	141°10'W	141°22'W	141°34'W	141°46'W	141°58'W	142°12°W	142°26'W	142°34'W	142°46'W	142°58¹W
	Latitude	08°37'S	08°32'S	08°12'S	07.5015	07°55'S	08°44'S	09°34'5	10°12'S	09°33'S	09.34'S	09°34'S	09°34'S	09°33'S	09.3215	09°32'S	8188.60	09°35'S	09°34'S	09°33'S	09°34'S	09°32'S	08°44¹S	08°23'S	08.0215	07°46'S	07°26'S	S,90.20	06°46'S	06°26'S	06.05'S	05°42'S	05°21'S	05.04'S	04°41'S	04°19'S
	Date, 1958	4/11	4/11	4/12	4/12	4/13	4/13	4/14	4/15	4/17	4/18	4/18	4/18	4/18	4/18	4/18	4/18	4/18	4/18	4/18	4/18	4/18	4/22	4/22	4/22	4/22	4/22	4/22	4/22	4/22	4/23	4/23	4/23	4/23	4/23	4/23
	Time, GCT	2104	2200	0132	2200	0014	2200	2200	2200	2200	0000	0200	0400	0090	0800	1000	1200	1400	1600	1800	2000	2147	0000	0305	0090	0060	1200	1500	1800	2100	0000	0300	0090	0060	1200	1500
	Ser. No.	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	569	270	271	272	273	274	275	276	277	278	279	280

Table 4. --Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

		ı																																		
Surf.	РО4-Р, нg at./L.	0.50	1	09.0	1	0.54	4	0.59	ı	0.61	ı	69.0		09.0	1	0.84	1	0.52	,	0.40	ı	0.34	1	0.33	ě	0.44	ı	0.49	1	0.42	•	0.44	í	0.35	ι	0.50
Surf.	8al.,	35.13	ı	35.08	1	35,14	1	35.19		35,23	ı	35.36	ι	35.37	ł	35.18	1	34.98	ı	34.84		34.72	1	34.19		34.64	ı	34.61	1	34.61	ŧ	34.72	,	34.69	4	34.82
п	Amt.	-	-	г	П	г	П	-	~	Г	н	-	н	н	Н	П	П	Н	П	Н	н	1	Н	Н	_	П	Н	ч	4	4	4	4	4	4	4	41
Swell	Dir.	090	080	080	080	080	080	080	080	080	080	080	080	080	080	080	080	080	080	080	080	080		080	080	030	030	040	040	030	040	040	040	040	040	040
	Sea	~	2			2	2	2	2	2		2	2	2	2	2	7		2	2	2	2	2	2	2	2	2				3				4	- 1
Kall	Visibil	∞	œ	∞	7	2	2	2	∞	œ	∞	ø	∞	œ	2	7	7	∞	∞	00	∞	2	œ	2	9	7	œ	2	7	2	~	~	2	9	9	9
	Cover	5	9	2	7	×	×	×	2	2	2	1	2	×	×	×	2	4	9	70	9	×	×	×	×	2	∞	œ	7	×	2	×	×	00	œ	7
Clouds	Type	4,8	∞	9,4	6	×	×	×	∞	∞	∞	00	4	×	×	×	00	8,4	8	8,5	8,5	×	×	×	×	5,4,7	8,9	6,4,8	5,6	×	6	×	×	7,8,5	7,5	7,5,8
	wea- ther	03	0.2	14	14	00	00	00	00	0.2	0 1	0.2	02	00	00	00	03	03	03	0.2	0.5	00	00	09	62	50	03	14	03	00	80	00	00	09	50	21
Baro-	meter, mb.	1012	1011	1009	1009	1010	1010	1008	1008	1010	1010	1007	1007	1008	1010	1008	1008	1009	1008	1007	1007	1009	1009	1008	1009	1010	1011	1008	1008	1010	1010	1008	1009	1011	1011	1009
temp.	Wet bulb,	79.8	6.62	78.6	77.4	77.8	77.6	77.1	76.7	78.1	78.9	78.1	78.3		78.5	78.2	78.8	80.0	80.1	80.3		78.6	78.7	77.9	XXX	9.92	77.7	78.2	77.2	77.1	78.0	78.6	78.1	77.7	77.8	78.4
Alr te	Dry bulb,	84.5	'n	83.4	0	80.8	1.3	2.2	9	3,	85.9	4	84.4	2	3	81.9	2	4.	84.5		83.2	83.3	82.6	80.2	XXX	79.4	83.3	81.5	81.4	80.2	81.5	80.2	82.0	٠,0	79.5	_
	Force, kt.	11	20	10	20	03	03	04	0.2	20	20	0.5	60	80	11	14	12	13	0.8	60	XX	60	08								13				20	
Wind	Dir., F	050	050	020	270	250	270	030	060	060	100	001	110	100	130	130	130	120	120	120	XXX	180	220	340	290	360	020	070	050	080	090	090	090	050	090	090
Bkt.	·F.	3.4	4.0	2	3.3	3.0	0	3.1	2.9	2.7	e,	3.	3	2.	32.5	2.	2.	2.	3,	3	3.8	3	3.2	2.5	2.1	1.5	2.3	2.5	2.3	2.2	2.0	0	5	2	81.2	
<u> </u>	e te	ω	ω	ω	ω	ω	ω	œ	00	00	00	∞	œ	00	00	œ	œ	∞	80	80	∞	œ	œ	00	α	œ	00	00	∞	00	∞	α	œ	∞	αο	∞
	Longitud	143°13°W		-			144°24'W	144°37'W	144°50'W	-	145°20°W	145°32'W	145°44'W	145°57°W					147°04'W	***	147°28'W	147°40'W	147°50'W		148°14'W	148°26'W		944	-	_	149° 15°W		149°37°W	149°52'W	150°07'W	150°20'W
	Latitude	03°58'S	03°38'S	03°16'S	02.55'S	02°34'S	02.16'S	01°54'S	01°33'S	01.11	00.49'S	00.25'S	100.00	00°22'N	00°42'N	01.04'N	01°26'N	01°48'N	02.08'N	02°28'N	02°52'N	03°15'N	~	03°55'N	04°16'N	04°37'N	04°58'N	05°18'N	05°41'N	06°02'N	06°20'N	06°42¹N	N,50.20	07 *24'N	4	08.05'N
3	Date, 1958	4/23	4/23	4/24	4/24	4/24	4/24	4/24	4/24	4/24	4/24	4/25	4/25	4/25	4/25	4/25	4/25	4/25	4/25	\sim	4/26	4/26	4/26	4/26	4/26	4/26	4/26	4/27	4/27		4/27	4/27	4/27	4/27		4/28
Ē	GCT	1800	2100	0000	0300	0090	0060	1200	1500	1800	2100	0000	0300	0090	0060	1200	1500	1800	2100	0000	0300	0090	0060	1200	1500	1800	2100	0000	0300	0090	0060	1200	1500	1800	2100	0000
1	No.	281	282	283	284	285	286	287	288	289	290	162	292	293	294	295	962	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315

Table 4. --Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Longitude temp., Dir., Force, Dry Wet metar, ther Type						i i	Wind	pu	Air temp.	-	1		Clouds		īελ		Swell	Surf.	Surf.
0300 4/28 08°529'N 150°32'W 81.1 050 19 80.9 77.5 1009 14 7.5 0600 4/28 08°51'N 150°45'W 81.0 060 20 81.1 76.3 1010 00 X 1200 4/28 09°52'N 151°51'W 81.0 060 20 81.1 76.3 1010 00 X 150°0 4/28 09°52'N 151°22'W 80.7 070 18 79.7 76.1 1009 00 X 150°0 4/28 09°52'N 151°22'W 80.7 070 18 79.7 76.1 1009 00 X 150°0 4/28 10°35'N 151°38'W 80.4 060 16 79.0 76.2 1011 02 8 1000 4/29 10°58'N 152°06'W 80.5 070 16 81.2 7°.0 1010 02 8 1000 4/29 10°58'N 152°31'W 80.0 060 16 79.8 75.6 1012 02 8 1000 4/29 11°44'N 152°31'W 80.0 060 16 79.8 75.6 1012 00 X 150°0 4/29 11°44'N 152°31'W 80.0 060 16 79.8 75.6 1012 00 X 150°0 4/30 13°52'N 153°45'W 79.0 080 16 79.4 73.6 1013 00 X 150°0 4/30 13°52'N 154°09'W 77.5 060 17 76.0 73.1 1013 00 X 150°0 4/30 15°21'N 154°59'W 77.5 060 17 76.0 73.1 1013 00 X 150°0 4/30 16°09'N 77.5 060 17 76.0 73.1 1013 00 X 150°0 5/1 17°42'N 155°59'W 77.5 060 17 76.0 73.1 1013 00 X 150°0 5/1 17°42'N 155°59'W 75.5 070 22 74.2 70.5 1014 00 8 18°0 5/1 17°42'N 155°59'W 76.5 070 22 74.2 70.5 1014 00 8 18°0 5/1 18°18'N 155°59'W 76.8 230 04 75.5 70.7 1015 01 8,2 1000 6/2 6/2 1000 6/2 6/2 10°0 17 76.2 1015 01 8,2 1000 6/2 6/2 10°0 17 76.2 1015 01 8,2 1000 6/2 6/2 10°0 17 76.2 1015 01 8,2 1000 6/2 6/2 10°0 17 76.2 1015 01 8,2 1000 6/2 6/2 10°0 17 76.2 1015 01 8,2 1000 6/2 6/2 10°0 17 76.2 1015 01 8,2 1000 6/2 6/2 10°0 17 76.2 1015 01 8,2 1000 6/2 6/2 10°0 17 76.2 1015 01 8/2 1000 6/2 6/2 10°0 17 76.2 1015 01 8/2 1000 6/2 6/2 10°0 17 76.2 1015 01 8/2 1000 6/2 6/2 10°0 17 76.2 1015 01 8/2 1000 6/2 6/2 10°0 17 76.2 1015 01 8/2 1000 6/2 6/2 10°0 17 76.2 1015 01 8/2 1000 6/2 6/2 10°0 17 76.2 1015 01 8/2 1000 6/2 6/2 10°0 17 76.2 1015 01 8/2 1000 6/2 6/2 10°0 17 76.2 1015 01 8/2 1000 6/2 6/2 10°0 17 76.2 1015 01 8/2 10°0 17 76.2 1015 01 8/2 1000 6/2 6/2 10°0 17 76.2 1015 01 8/2 1000 17 76.2 1000 6/2 6/2 10°0 17 76.2 1015 01 8/2 1000 6/2 6/2 10°0 17 76.2 1000 6/2 6/2 10°0 17 76.2 1000 6/2 6/2 10°0 17 76.2 1015 01 8/2 1000 6/2 6/2 10°0 17 76.2 1000 6/2 6/2 10°0 17 76.2 1000 6/2 6/2 10°0 17 76.2 10°0 17 76.2 1000 6/2 6/2 10°0 17 76.2 10	er.	Time, GCT	Date, 1958	Latitude			Dir., °T.	Force, kt.			meter, mb.	Wea- ther	Туре	Cover	lidiaiV	Sea U •	Dir. Amt.	sal.,	
0500 4/28 09°52¹N 150°58¹W 81.0 060 17 80.0 77.0 1010 00 X 0900 4/28 09°52¹N 150°08¹W 81.0 060 20 81.1 76.3 1010 00 X 1200 4/28 09°52¹N 151°10¹W 80.9 080 20 79.5 76.3 1009 00 X 150°08¹N 151°22¹W 80.7 070 18 79.7 76.1 1009 00 X 150°0 4/28 10°35¹N 151°23¹W 80.2 070 16 79.0 76.2 1011 03 8,1 2100 4/28 10°35¹N 151°53¹W 80.2 070 16 81.2 77.0 1010 02 8 0000 4/29 10°58¹N 152°06¹W 80.5 070 16 81.2 77.0 1010 02 8 1200 4/29 11°44¹N 152°31¹W 80.0 060 16 79.8 75.6 1012 00 X 150°0 4/29 11°44¹N 152°54¹W 79.3 070 16 81.2 77.0 1010 02 8 1800 4/29 12°24¹N 153°20¹W 79.0 080 16 79.8 75.6 1012 00 X 150°0 4/29 13°08¹N 153°20¹W 79.0 080 16 78.9 74.0 1013 03 8,4 1800 4/30 13°52¹N 154°09¹W 77.9 080 15 77.7 73.1 1013 00 X 150°0 4/30 15°21¹N 154°20¹W 77.9 080 15 77.7 73.1 1013 00 X 150°0 4/30 15°21¹N 154°52¹W 77.3 060 17 76.0 73.1 1013 00 X 180°0 5/1 16°09¹N 155°59¹W 77.5 060 17 76.0 73.1 1015 00 X 180°0 5/1 17°42¹N 155°59¹W 75.5 070 18 75.9 71.7 1015 00 X 180°0 5/1 17°42¹N 155°59¹W 75.5 070 18 75.9 71.7 1015 01 8.7 120°0 5/1 18°03¹N 155°59¹W 75.5 070 16 75.5 71.7 1015 01 8.7 120°0 5/1 18°03¹N 155°59¹W 75.5 070 16 75.5 71.7 1015 01 8.7 120°0 5/1 18°03¹N 155°59¹W 75.5 070 16 77.7 72.2 1015 01 8.7 120°0 5/1 18°03¹N 155°59¹W 75.5 070 16 77.7 72.2 1015 01 8.7 120°0 5/1 18°03¹N 155°59¹W 75.3 060 16 77.7 72.2 1015 01 8.7 120°0 5/1 18°03¹N 155°59¹W 75.5 070 16 77.7 77.1 77.2 1015 01 8.7 120°0 5/1 18°03°N 155°04°N 75.0 060 16 77.7 77.1 77.2 1015 01 8.7 120°05 5/1 18°03°N 155°04°N 75.3 060 16 77.7 77.1 77.2 1015 01 8.7 120°05 5/1 18°03°N 155°04°N 75.3 060 16 77.7 77.1 77.2 1015 01 8.0 6 6 77.7 77.1 77.2 1015 01 8.7 17.7 17.2 1015 01 8.7 17.7 17.2 1015 01 8.0 6 6 77.7 17.7 17.2 1015 01 8.0 6 77.7 17.7 17.2 1015 01 8.0 6 77.7 17.7 17.2 1015 01 8.0 6 77.7 17.2 1015 01 8.0 6 77.7 17.2 17.7 17.2 1015 01 8.0 6 77.7 17.2 17.7 17.2 1015 01 8.0 6 77.7 17.2 17.7 17.2 1015 01 8.0 6 77.7 17.2 17.7 17.2 1015 01 8.0 6 77.7 17.7 17.2 17.1 17.2 1015 01 8.0 6 77.7 17.2 17.1 17.1 17.1 17.1 17.1 17.1	71	0300	4/28	N100.80	-	81.1	050	19	-	77.5	1009	14	7,5	8	9	4 04	10 4	t	ŧ
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1800 4/28 10°14¹N 151°38¹W 80.4 060 16 79.0 76.2 1011 03 8,1 2100 4/28 10°35¹N 151°53¹W 80.2 070 18 81.3 76.7 1011 02 8 0000 4/29 10°58¹N 152°06¹W 80.5 070 16 81.2 77.0 1010 02 8 0600 4/29 11°44¹N 152°31¹W 80.0 060 16 79.8 75.6 1012 00 X 1200 4/29 12°24¹N 152°54¹W 79.3 070 19 78.0 74.6 1010 00 X 1800 4/29 13°08¹N 153°20¹W 79.0 080 16 78.9 74.0 1013 03 8,4 0000 4/30 13°52¹N 153°45¹W 77.9 080 15 77.7 73.1 1013 00 X 1200 4/30 15°21¹N 154°28¹W 77.5 060 17 76.0 73.1 1013 00 X 1200 4/30 15°21¹N 155°16¹W 77.0 060 19 77.1 73.2 1015 03 6 1800 5/1 17°42¹N 155°59¹W 76.5 060 18 75.9 71.7 1015 00 X 1200 5/1 18°18¹N 155°59¹W 76.5 070 22 74.2 70.5 1014 00 8 1800 5/1 19°03¹N 156°23¹W 76.8 230 04 75.5 70.7 1015 01 8,2 0000 5/2 19°49¹N 156°34¹W 76.3 080 16 77.1 72.2 1015 80 6	20	1500	4/28	09°52'N	-	80.7	020	18		1.92	1009	00	×	×	9	4 04	10 4		ŧ
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0600 4/30 14°40¹N 154°52¹W 77.9 080 15 77.7 73.1 1013 00 X 1200 4/30 15°21¹N 154°52¹W 77.5 060 17 76.0 73.1 1013 00 X 1800 4/30 16°09¹N 154°52¹W 77.3 060 19 77.1 73.2 1015 03 6 0000 5/1 16°57¹N 155°16¹W 77.0 060 15 78.5 72.3 1014 02 6,1 0600 5/1 17°42¹N 155°40¹W 76.6 060 18 75.9 71.7 1015 00 X 1200 5/1 18°18¹N 155°59¹W 76.5 070 22 74.2 70.5 1014 00 8 1800 5/1 19°03¹N 156°23¹W 76.8 230 04 75.5 70.7 1016 03 6 1800 5/1 19°49¹N 156°44¹W 76.3 080 16 77.1 72.2 1015 01 8,2 000 5/2 19°49¹N 156°44¹W 76.3 080 17 77.1 72.2 1015 01 8,2 000 5/2 19°49¹N 156°44¹W 76.3 080 17 77.1 72.2 1015 01 8,2 000 5/2 19°49¹N 156°44¹W 76.3 080 17 77.1 72.2 1015 01 8,2 000 5/2 19°49²N 166°41˚W 76.3 080 17 77.1 72.2 1015 01 8,2 000 5/2 19°49˚N 16°41˚W 76.3 080 17 77.1 72.2 1015 01 8,2 000 5/2 10°40˚N 16°41˚W 76.3 080 17 77.1 72.2 1015 01 8,2 000 5/2 10°40˚N 16°41˚W 76.3 080 17 77.4 70.4 1015 80 6	7	0000	4/30	13°52'N	153°45'W	78.2	080	14		73.6	1012	03	5,4	7	7		50 4	34.57	
1200 4/30 15°21'N 154°28'W 77.5 060 17 76.0 73.1 1013 00 X 1800 4/30 16°09'N 154°52'W 77.3 060 19 77.1 73.2 1015 03 6 0000 5/1 16°57'N 155°16'W 77.0 060 15 78.5 72.3 1014 02 6,1 0600 5/1 17°42'N 155°40'W 76.6 060 18 75.9 71.7 1015 00 X 1200 5/1 18°18'N 155°59'W 75.5 070 22 74.2 70.5 1014 00 8 1800 5/1 19°03'N 156°23'W 76.8 230 04 75.5 70.7 1016 03 6 1800 5/2 19°49'N 156°44'W 76.3 080 16 77.1 72.2 1015 01 8,2 0000 5/2 19°49'N 156°44'W 76.3 080 12 76.4 70.4 1015 80	- 00	0090	4/30	14°40'N	154°09'W	77.9	080	15		73.1	1013	00	×	×	7		50 4	34.69	
1800 4/30 16°09'N 154°52'W 77.3 060 19 77.1 73.2 1015 03 6 0000 5/1 16°57'N 155°16'W 77.0 060 15 78.5 72.3 1014 02 6,1 0600 5/1 17°42'N 155°40'W 76.6 060 18 75.9 71.7 1015 00 X 1200 5/1 18°18'N 155°59'W 75.5 070 22 74.2 70.5 1014 00 8 1800 5/1 19°03'N 156°23'W 76.8 230 04 75.5 70.7 1016 03 6 0000 5/2 19°49'N 156°44'W 76.3 080 15 77.1 72.2 1015 01 8,2	0	1200	4/30	15°21'N	154°28¹W	77.5	090	17		73.1	1013	00	×	×	7	3 0	050 4	34,65	
0000 5/1 16°57'N 155°16'W 77.0 060 15 78.5 72.3 1014 02 6,1 0600 5/1 17°42'N 155°40'W 76.6 060 18 75.9 71.7 1015 00 X 1200 5/1 18°18'N 155°59'W 75.5 070 22 74.2 70.5 1014 00 8 1800 5/1 19°03'N 156°23'W 76.8 230 04 75.5 70.7 1016 03 6 0000 5/2 19°49'N 156°44'W 76.3 060 16 77.1 72.2 1015 01 8,2	30	1800	4/30	N,60.91	154°52'W	77.3	090	19		73.2	1015	03	9	7	7	3 0	50 4	34.63	
0000 5/1 17.42 N 155.40 W 76.6 060 18 75.9 71.7 1015 00 X 1200 5/1 17.42 N 155.59 W 75.5 070 22 74.2 70.5 1014 00 8 1800 5/1 19.03 N 156.23 W 76.8 230 04 75.5 70.7 1016 03 6 00 5/2 19.49 N 156.44 W 76.3 060 16 77.1 72.2 1015 01 8,2 00 5/2 19.45 N 156.44 W 76.3 080 12 76.4 70.4 1015 80 6			1/2	160E71NI	155°15'W	77 0	040	15	78.5		1014	0.2	6,1	ъ	∞	3 0	50 4	34.67	
1200 5/1 18°18¹N 155°59¹W 75.5 070 22 74.2 70.5 1014 00 8 1800 5/1 19°03¹N 156°23¹W 76.8 230 04 75.5 70.7 1016 03 6 1800 5/2 19°49¹N 156°44¹W 76.3 060 16 77.1 72.2 1015 01 8,2	32	0000	5/1	17°42'N	155°40'W	76.6	090	18		71.7	1015	00	×	×	7	3 0	050 4	34.64	0.35
1200 5/1 19°03'N 156°23'W 76.8 230 04 75.5 70.7 1016 03 6 1000 5/2 19°49'N 156°44'W 76.3 060 16 77.1 72.2 1015 01 8,2	1 6	1200	5/1	18°18'N	155°59'W	75.5	070	22		70.5	1014	00	00	1	∞	4 0	50 4		
1000 5/2 19°49'N 156°44'W 76.3 60 16 77.1 72.2 1015 01 8,2	2 6	0001	7 7	10°01	156°23°W	76.8	230	0.4		70.7	1016	03	9	3	2	3 I			
000 0/2 17 2/3 200 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 2	0000		N 60 61	156°44'W	76.3	090	16		72.2	1015	0.1	8,2	2	∞	3 0.	040 1		
0600 5/2 20*45'N 15' W /0.1 000 12 /0.3 /0.3 00	36	0090		20°45'N	157°15'W	76.7	080	12		70.4	1015	80	9	4	00	3 0	080		

Table 5. --Observations at bathythermograph lowerings, Hugh M. Smith cruise 45 (coded according to H. O. Pub. 606-c, second edition, 1956)

	v.i																																					
8,1326	14 00	,	1	1	1	ı	1	1	4	ı	ı	ı	ŧ	•	1	1	ı	1	1	1	i	ı	4	1	1	1	1	1	1	1	ı	1	1	1	1	1	ì	1
Cure	sal.,		1	ı	ı	1	1	j	ı	ı	1	ı	ı	ı	1	ı	ı	ı	ı	1	1	1	1	1	1	1	1	ı	ı	ı	•	J	ı	ı	ı	ı	ı	
Ti-	Amt.		4	1	_	1	4	4	4	4	4	4	4	4	4	4	4	4	4	Н	4	4	4	4	4	4	7	ı	-	_	1	1	1	г	1	П	П	
Swell	Dir.	140	080	090	090	040	090	040	040	090	020	080	070	080	080	080	070	090	070	060	020	090	090	040	020	090	090	020	080	080	150	XXX	110	140	150	140	110	120
	Sea	2	4	×	4	4,	4	2	4	Ŋ	ស	រប	ĸ	4	ıΩ	4	4	4	4	3	3	Ŋ	ហ	4	S	3	2	3	3	-41	2	2	2	2	7	3	3	2
ŢĘλ	IldialV	~	9	9	~	9	ស	9	7	9	9	9	7	9	9	9	9	9	2	9	9	9	9	9	9	ហ	ហ	ហ	9	9	9	9	9	9	9	9	9	9
88	Cover	9	7	2	2	3	œ	ហ	2	2	4	2	9	9	9	9	2	2	4	7	9	7	œ	∞	77	00	00	œ	œ	2	r.	2	6		2	2	3	2
Clouds	Туре	1.2.6.4		8	8	9,8,1	6	9,8,2	∞	1, 3, 8, 9	∞	8,6		1,4,8,9	9	1,3,8	1,3,6,8	, 4,8	8,6	8,4	8,6	1,6,8	9	9	4, 1, 6, 8		9		4,6,8	8,9	8,6	80	6, 1, 8, 4,	6	∞			8
	Wea- ther	15	02	0.1	0.1	15	18	15	02	15	02	0.1	15	16	18	02	03	0.1	03	03	0.1	03	0.2	0.2	02	25	25	50	51	20	03	02	15	15	0.1	80	0 1	02
D * C D	meter, mb.	1017	1018	1018	1018	1016	1017	1017	1017	1015	1016	1015	1015	1012	1014	1012	1013	1012	1013	1012	1012	1010	1012	1010	1012	1008	1010	1007	1010	1001	1009	1008	1010	1007	1010	1008	1011	1008
temp.	Wet bulb,		œ		8.69		70.2	7.69	69.7	71.5	71.3	70.5	72.0	73.5	73.1	73.0	2.	73.5	73.2	73.1	4.	74.0	75.2	75.2	9.92	78.0	77.5	œ	78.0		78.5	78.0	74.9	78.0	77.0	78.0	œ	78.1
Air t	Dry bulb,	78.0	73.8	73.0	74.5	76.0	71.8	73.7	75.1	7	74.5	75.2	76.8	77.5	77.0	77.2		79.0	78.1	78.0	78.8	79.5	œ	78.8	81.6	81.0	0	80.3	ij	Η.	82.8	83.0	83.0	84.5	84.1	84.0	85.0	84.0
pu	Force, kt.	12	28	21	20	20	24	28	26	27	27	24	26	25	24	27	24	24	24	25	24	25	20	97	24	25	16	18	13	20	18	14	91	18	20	16	18	14
Wind	Dir.,	170	020	090	090	070	070	080	090	090	020	070	070	070	080	070	070	050	070	050	020	050	020	090	050	090	040	090	110	010	130	140	100	120	100	100	110	100
47.4	temp.,	76.2	74.4	4.	'n	ıS.	75.3	75.6	9	76.7	7	77.4	77.4	79.0	79.2	9.62	79.0	80.1	78.5		0.62	90.08	80.4	80.8	81.6		82.0		81.5				83.8		84.6	84.6	84.8	
	Longitude	155°59'W	10	154°53'W	154°41'W	153°41'W	153°05'W	152°33'W	152°00'W	151°35'W	151°00'W	150°28'W	149°54'W	149°20'W	148°46'W	148°15'W	147°42'W	147°08'W	146°29'W	145°56'W	145°18'W	144°50°W	144°11'W		143°01'W	142°22'W	141°42'W	141°01'W	the contract of	140°00'W	142°51'W	143°18'W	143°49'W		144°40¹W	145°12'W	5°321	145°55°W
	Latitude	19°03'N	18°29'N	18°03'N	17°26'N	16°45'N	16°12'N	15°48'N	15°20'N	14°46'N	14°14'N	13°47'N	13°15'N	12°44'N	12°11'N	11°44'N	11°12'N	N168.01	10°08'N	09°42'N	09°10'N	08°38¹N	08°05'N	07°38'N	N ₁ 90°20	N198.90	N,80.90	05°44'N	0	04°37'N	04°17¹S	05°04'S	05°53'S	06°45'S	S198.20	08.4615	09°28'S	10°17'S
	Date, 1958	3/30	~	3/30	3/30	3/31	3/31	3/31	3/31	4/1	4/1	4/1	4/1	4/2	4/2	4/2	4/2	4/3	4/3	4/3	4/3	4/3	4/4	4/4	4/4	4/5	4/5	4/5	4/5	4/6	4/29	4/29	4/29	4/29	4/30	4/30	4/30	4/30
	Time, GCT	0002	0603	1205	1810	00100	0602	1200	1805	0000	0090	1205	1805	0100	0090	1205	1800	0000	0605	1200	1800	2345	0090	1200	1805	0000	0090	1210	1810	0000	0090	1130	1800	2330	0530	1300	1800	2330
	No.	-	2	3	4	Ŋ	9	2	00	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	97	27	28	53	243	244	245	246	247	248	249	250

Table 5. --Observations at bathythermograph lowerings, Hugh M. Smith cruise 45 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

					44 a	Wi	Wind	Air temp.	<u> </u>	Raro		Clouds	_	ίty	_	Swell	Ū	71117	7.10
Ser.	Time,				DAL.	1	1	Drv	Wet	-0120	Wea-				_	-	<u> </u>		ouri.
No.	GCT	1958	Latitude	Longitude	temp.,	°T.	kt.			meter, mb.	ther	Type	Cover	VisiV	Ses H		Amt.	8al., P % µg	PO4-P, g at./L.
251	0090	5/1	11°14'S	146°21'W	84.3	100	14	4.0 7	8.0	1010	02	8	-	1	2 12	0			,
252	1120	5/1	12°02'S	146°44'W	84.0	110	14	3.2 7	6.5	1010	02	00	П	9	2 130	0	1		
253	1800	5/1	12°54'S	147°17'W	83.9	060	14	.5 7	8.5	1011	0.2	8,9	7			0	-1	,	ı
254	2330	5/1	13°32'S	147°58'W	4.	120	16	4.1 7	8.0	1010	0.2	8,9	2			. 0		1	ı
255	0090	5/2	14°19'S	148°45'W		120	12	3.5 7	7.5	1010	02	00	П		2 090	0	-		1
256	1135	5/2	15°14'S	149°01'W	3.	140	14	2.6 7	8.9	1010	0.2	00	П			. 0	1	,	1
257	1800	5/2	16°30'S	149°15'W	3	060	14	3.5 7	7.6	1012	0.2	8,9	П			0	1	1	•
258	2335	5/2.	17°04'S	149°28'W	83.9	100	91	3.0 7	8.9	1010	02	1,8,9	3			0	_	ı	,
259	1800	5/7	17°35'S	149°02'W	2	040	23	.4 7		1010	0.2	0	80		3 040	0	1		,
260	2355	2/2	16°58'S	148°26'W	83.1	010	18	2.5	74.9	1008	02	0	7		3 010	0	_		ŀ
261	0603	5/8	16.18'S	147°52'W	83.1	010	23	0 7	6.3	1011	80	9	00		3 010	0	_		1
262	1200	5/8	15°58'S	147°36'W		020	91	2.5 7		10 10	0.1	1,2,4,8	2	9		0			ı
263	1800	5/8	15°42'S	147°22'W	33	020	18	3.2 7	6.8	1010	01	4,8	ហ		2 020	0	_		ı
264	2355	5/8	14.59'S	146°46'W	83.7	070	12	83.8 75	5.5	1009	0.1	4,8	3	9	2 030	0	1	,	1
265	0090	6/9	14°14'S	146°16'W		020	12	3.0 7	76.3	1010	0.1	4,8	2		2 040	0	-		1
566	1200	6/9	13°40'S	145°34'W	3,	090	15	3.0 7	6.3	1008	0.2	4,8	3			0		,	
267	1800	6/9	13.05'S	I44°52'W	83.2	020	14	5 7	7.2	1011	0.2	8,6	н			0	-		
268	0000	5/10	12°31'S	144°11'W	4.	070	10	3.9 7	0.97	1008	0.2	80	п			0		,	1
569	0090	5/10	11°57'S	143°32'W		100	14	3 7	8.2	1010	0.1	80	Ι		2 060	0			,
270	1200	5/10	11°24'S	I42°54'W	83.0	011	14	2.5 7	7.0	1009	00	80	Н		2 090	0	П	,	ı
271	1800	01/5	10.4018	1420161W		100	a	7	C Lt	1012	00	α	-		100	_			
272	0000	5/11	10°18'S	141°40'W	84.0	110	18	4.5 7	. 7	1007	03	0 00	2 4	9 9	3 100				
273	0090	5/11	09°47'S	141°00'W	3	110	17	3.0 7	8.0	1009	10	80	2		3 100		3	,	
274	1200	5/11	S,51.60	140°18'W	3,	010	12	0.0	8.9	1008	0.2	∞	П		3 080		3	1	•
275	1500	5/15	09 • 12 ¹ S	139°38'W		070	14	2.0 7	6.2	1010	0.2	80	1				1 35	06.	0.59
276	1800	5/15	09°12'S	139°17'W	83.1	060	12	2.9 7	9.9	1012	03	80	2					.88	0.56
277	2100	5/15	09°14'S	138°58°W		100	12	3.0 7	8.9	1010	0.2	80	2		2 090			36.02	0.74
278	0010	5/16	S ₁ 80 _* 60	138°40'W		130	14	8 7	7.0	1008	0.2	64	2					.94	0.57
279	0300	91/9	S, 20.60	138°24'W	82.8	130	13	2.5 7	7.5	1008	0.2	8,1,2	2					.15	0.62
280	0632	5/16	5,80,60	138°04°W	2	110	16	2.2 7	0.9	1010	02	80	1		2 120			16.	0.61
281	0060	5/16	S,01.60	137°46'W	82.4	110	14	1.7 7	0.9	1010	02	œ	1		2 120		m	6	0.58
282	1200	5/16	09°12'S	137°22'W		100	10	1.6 7	5.7	1009	0.2	00	П		2 100		n	9	0.49
283	1503	5/16	09 • 14 ¹ S	137°06'W		110	80	1.3 7	5.2	1010	0.2		7		2 090		C)	00	0.58
284	1810	5/16	S,01.60	136°47'W	82.8	110	13	82.2 76	6.2	1012	0.2	8,5	2	, 9	2 110		1 35.	06.	0.59
285	2100	5/16	S,01.60	136°27'W		100	12	2.8 7	5.4	1010	0.2		7				co	6	0.55

Table 5. --Observations at bathythermograph lowerings, Hugh M. Smith cruise 45 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

	ز د																																			
9200	H H	1 10	0.37	Ŋ	9	0.59	Ö		0.2	0.5	0	1			0.42	1	1	1	1	ι	0.53	0.48	1	ı	0.48	1	ı	0.52	1	0.53	0.37	0.26	0.53	0.53	1	0.53
75	sal.,	5	5	10	ω.	35.95	5	. 70	ις.	35.89	10	5	9	5	ď.	35.94	35.94	36.00	5.9	5.9	35.85	5.8	6.1	1	35.88	5.9	35.89	35.91	5	35.94	5	Ŋ	35.89	5	35.87	5.
ell	Amt.	-	1	1	1	-	-	-	-	П	П	П	ч	г	1	-	н	1	-	1	7	_	1	_	1	-	-	I	7	1	7	7	1	П	-	
Swell	Dir.	060	100	100	060	060	060	020	060	060	080	060	100	080	080	100	100	080	080	080	100	100	100	100	020	060	060	060	060	060	060	100	110	100	060	060
	Sea	6	3	3	2	2	2	2	2	2	2	2	2		2	2	7		7		7	2	7			7	7	2				2	2	2	7	
τελ	IidisiV	2	2	2	2	2	2	9	9	9	2	9	00	2	00	00	~	9	2	~	~	2	9	9	~	9	9	9	9	2	9	9	9	9	~	2
	Cover	2	4	4	2	1	-	-	2	7	2	3	7	2	7	2	2	2	2	2	2	J.	1	-	-	ć	3	3	4,	1	-	9	2	9	3	4
Clouds	Type	2,	1,2,8	2,	1	×	00	8,1	8,1	80	8,1	8,1	8	8	8,6	∞	8,1	2,8,1	×	×	00		4,8	4,8		8,6,9	×	×	×	8,4	8,6	8,6	8,6	9,6	9,6,1,3	9
	Wea- ther	03	03	03	02	02	02	02	03	0.2	0.2	03	01	0.2	0.5	0.5	02	03	02	0.2	0.2	03	0.1	0.1	02	15	0.2	02	64	03	0.5	15	95	91	15	81
Baro-	meter,	1010	1009	1010	1012	1012	1010	1011	1012	1011	1009	1009	1011	1012	1013	1013	1010	1010	1012	1012	1010	1012	1013	1012	1009	1009	1010	1011	1010	1010	1011	1010	1009	1008	1008	1008
Air temp.	Wet bulb,	75.2	'n	ın	75.0	9	75.5		4	75.8	8.92	75.7	75.5	75.0	75.3	76.2	76.2	76.5	77.0	0.97	75.3	75.4	76.3	76.3	77.3	76.3	77.2		0.97	75.7	75.8	78.4	8.92	77.7	8.92	9
Air t	Dry bulb,	2	2	2	82.1	Ξ.	81.2	_	82.9	83.0	XXX	82.7	82.2	81.8	82.9	83.8	83.8	83.0	83.2						XXX	83.9	83.6	82.5	Ξ.	82.4	83.3	$\vec{}$	\dashv	87.8	81.8	80.3
pı	Force, kt.	12	13	80	14	11	10	13	14	12	80	12	12	18	18	20	10	19	17	14	14	14	12	14	11	12	12	14	14	18	10	15	10	12	18	20
Wind	Dir., °T.	100	100	130	060	100	080	060	080	060	080	060	130	110	100	060	100	060	120	140	100	100	070	060	020	060	100	120	120	080	080	130	130	100	060	100
Bkt.	temp.,	2.	5	2	82.5	2.		2	2.	83.0	3,		2.	82.7	3		3	83.7	83.2	3,	83.8	3.	4.	84.2	4.	84.2	84.0	83.8	3,	3	83.8	4.	3	3.	83.2	2
	Longitude t	-		135°53' W	136°08'W	136°34°W	137°02'W	137°20'W	_	138°03'W	-				140°04'W			141°08'W	141°19'W	-	142°02'W		-	W	4' W	143°22'W	143°06'W		-	142°05'W			141°13'W		140°50'W	140°34'W
	Latitude	8,01,60	S,50.60	ſΩ	09°10'S	ΙΩ	09*13'S	09°14'S	09°14'S	8,91.60	.14	.121	121	09°12'S	•121	09°16'S		09°12'S	09°12'S	09°12'S	121	09.12'S	.181	09°17'S	14	.11		09°13'S	0141	09°15'S	,121	141	09°14'S	° 14'	09°13'S	•121
_	Date, 1958	5/17	5/17	5/17	5/17	5/17	5/17	5/17	5/17	5/17	5/17	5/18	5/18	5/19	5/19	5/19	5/20	5/20	5/20	5/20	5/20	5/20	5/20	5/20	5/21	5/21	5/21	5/21	5/21	5/21	5/21	5/21	5/21	5/22	5/22	5/22
	Time, GCT			0300	0090	0060	1203	1500								2100		0300								0300									0	0615
	Ser.	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320

Table 5. --Observations at bathythermograph lowerings, Hugh M. Smith cruise 45 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

3	T:				Bkt.	Wind	pg	9 }	Baro			Clouds	ds	Ţţţλ		Swell		Surf.	Surf.
No.	GCT	1958	Latitude	Longitude	temp., F.	Dir., °T.	Force, kt.	Dry Wet bulb, bulb,	et meter lb, mb.		wea- ther	Type	Cover	idiaiV	Sea	Dir.	Amt.		РО4-Р, нg at./L.
321	0060	5/22	09°12'S	-	2.	110		82.4 76.	5 1		2	8	2	2		110	п	5.	0.55
322		5/23	09°12'S		2.	060			0		12	80	_	2		060	г	5.	0.59
323	1800	5/23	08°48'S	139°40'W	2.	060			3 1011		13	1,8	ιΩ	2		060	-	5.	0.27
324	2100	5/23	08.24'S	139°40'W	3.	080			3 1009		13	1,2,8	9	2		060	н	5.	0.73
325	0000	5/24	S,60.80	139°42'W		060		82.7 75.	5 1008		7	2,8	3	2		080	7	δ.	0.63
326	0300	5/24	07°52'S	_	2.	060			8 1008		12	2,8	4	2		060	-	5.	0.61
327	0190	5/24	S165°20	-		090		81.7 75.	_		1	8	1	2		080	_	35.30	0.69
328	0060	5/24	07°18'S	139°42'W	2.	020		2 *	_		12	8	-	2		080	_	4.	0.63
329	1200	5/24	06°54'S	139°41'W	82.3	020	11	80.5 75.	5		02	×	1	2	1 0	080	-	35.02	0.54
330	1500	5/24	06°38¹S	139°39'W		020	60	8 7	3 1010		3	8,1	41	~		020	П	4.9	0.53
331	1620	5/24	06°31'S		2	020			П		3	1,2,8	2	9		080	П	5.0	0.57
332	2110	5/24	05°58'S	139°36'W	83.4	100		× 7	2 1009		11	1,2,8	2	9		080	_	35.13	0.68
333	0003	5/25	05°42'S	139°37'W	3.	070		7	3 1008		12	8	1	9		020	_	ı	0.59
334	0250	5/25	05°25'S	139°40'W	83.3	120		82.0 75.	3 1008		13	8,2	4	9		100	-	u i	09.0
335	8190	5/25	05°38'S		82.7	100		7	2		2	8	1	9		100	_	LL)	0.64
336	0060	5/52	S,00.90		5	100			0		12	8	-	2		100	П	35.17	0.59
337	1200	5/25	06°24'S		82.7	000		7	8		13	8, 1	2	9		100	-	u)	0.57
338	1505	5/25	06°43¹S		82.2	140	18	7	П		63	2	00	Ŋ	2 1	140	Н	6	0.63
339	1800	5/25	07.041S	139°40'W	82.4	080	15	79.8 75.	2 1012		2	8,6	2	9		060		34.96	09.0
340	1920	5/25	07°11'S	139°42'W	82.6	080	90	2 6	3 1012	01	ις.	8,6	7	9		060		0	0.62
341	2100	5/25	07°24'S	139°42¹W	83.0	080	05	1.7 7	2 1010		75	6	2	9		100	1	5.4	0.74
342	2340	5/25	07°42'S	139°40'W	83.2	230	0.2	7 6.0	3 1009		2	8,9,6	2	9		100	г	5.7	0.63
343	0300	5/26	08.0815		83.2	020	0.5	1.3 7	-		1	8,6	2	9		060	_	35.90	0.73
344	0090	5/26	08.5615		82.9	120	20	1.6 7	_		2	00	7	9		060	_	5.8	0.64
345	0060	5/26	08.48'S	139°40'W	83.0	120	90	81.0 73.	1011 9		02	89	2	_	1 0	060	_	1	1
346	1502	5/27	09°14'S		82.3	020	16	0.8 7	_		12	4	_	7		020	-	35.88	0.47
347	1800	5/27	09°37'S		82.9	080	22	1.9	_		13	1,8,6	2	9		060	_	1	- 6
348	2100	5/27	10.001	139°40'W	83.0	080	18	2.7 7	_		12	φ.	7	2		120	Н	35.91	0.55
349	0000	5/28	10.2018	139°40'W	83.2	020	13	2 7	8 1009		3	8,9	'n	9		020	П	5.9	
350	0300	5/28	10°41'S	139°40¹W	82.9	020	18	2.7 7	_			1,8	7	9		020	-	5.9	
351	8090	5/28	10°54'S		7	020	16	2.0 7			11	00	Н	9		020		6.	0.59
352	0060	5/28	11°12'S	139°39'W	2	030	17	1.3 7	1 1		2	00	-	2		040		6	0.49
353	1200	5/28	11°30'S	139°39'W	87.8	090	12	81.7 76.	8 1010		02	00	1	9	1 0	020	_	36.00	0.46
354	1500	5/28	11°45'S	401	5	030	16	1.3 7	_		2	80	2	2		030		0	0.48
355	1800	5/28	12.041S	139°41'W	2	020	13	2.8 7	2 101	3	2	00	7	9		010	-	1	1
			,	1.1.															

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Table 5. --Observations at bathythermograph lowerings, Hugh M. Smith cruise 45 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Time. Date.					Bkt.	Wind	Pt	1 9 1		Baro-	Wea-	Clouds		ility		Swell			Surf.
1958 Latitude	1958 Latitude		Ä	Longitude	temp., •F.	Dir.,	Force, kt.	Dry w bulb, bu °F. °1	wet m bulb, n	meter, mb.	ther	Type	Cover	Visib	Sea	Dir.	Amt.	sal.,	РО4-Р, µg at./L.
1	12.0815	S	139	39°42¹W		020	14	7 7	.2	1013	15	8,6	2	9	7	010		0	. 2
	12°20'S		139	43'W	87.8	020	17	82.7 76	2.	1012	03	6,1,2,9,8	4	9	7	010	1 3	36.06	0.27
	12*38'S		139°	41tW	2	070	91	8*77	.2	1011	0.2	1,8	9	2	7	070		0	0.47
0300 5/29 12*56'S 139*38'	12.56'S		139°	381W	87.8	360	12	92 2	۲.	1101	0.2	-	9	9	7	360		0	0.62
12*38'S	12*38'S		139°	39'W	2	350	10	5 7	0.	1013	0.2	00	41	7	7	020		0	09.0
12°20'S	12°2015		139°	39'W	82.2	350	10	0	.7	1013	02	00	~	2	2	360		0.	
11°58'S	11°58'S		139*4	₩ 04	2	020	15	2	9	1011	0.2	6,8	41	2	7	020		0.	0.49
	11°40'S		139°4	M , 01	4	010	12	เา	0	1012	0.1	80	3	2	2	360		0.	
5/29 11°18'S	11°18'S		139°4	FI t W	87.8	070	60	82.6 75.	2	1013	02	00	2	9	7	070	1 3	36.02	
1905 5/29 11°10'S 139°44'W	11.10'S		139°4	14'W	2.	070	13	2	2	1012	02	8, 1	2	9	7	070		0.	
5/29 10°55'S	10.55'S		139.4	F2 t W	3	070	12	41	2	1012	03	8, 1	3	9	7	020		6.	0.52
5/30 10°42'S	10°42'S		139°4	£21W	3	010	0.8	00	00	1010	0.2	8,1	3	_	7	070		6.	
5/30 10°24'S	10°24'S		139°3	M.9	3	030	0.7	2 7	ش	1010	01	2,8,1	3	2	H	020		6.	
5/30 IO.08'S	10.0815		139°3	4'W	83.3	020	03	7	9	1012	02	8,2	3	2	П	020		6.	
	09°48¹S		139°34	M:T	2.	040	10	2 9	4.	1012	0 1	œ	-	~	г	030		6.	0.41
1200 5/30 09°25'S 139°34	09°25¹S		139°34	Μ		050	11	0 7	.2	1011	0.2	00	4	2	г	020		5.9	٠.
6/1 08°43'S	08°4315		140°33	W.	3.	040	18	2 6	7	1012	01	6,8,9	5	2	7	020		5.9	0.79
6/1 08°29'5	08.2915		140°38	W.	83.3	040	16	6	2	1010	01	8	2	2	7	020	1 3	5.93	0.89
6/2 07°45'S	07°45'S		140 . 12	M.	÷	020	14	8	.2	1011	01		П	_	-	020		5.5	0.49
6/2 07°45'S	07 45'S		140.07	Z 1 W		060	10	7 4	2.	6001	0.2	6,8,9	7	7	7	090		5.9	ı.
6/3 08*40'S	08.40'S		139.5	W O	2	080	14	5 7	2	0101	0.1	00	-	_	7	080		1	ı
6/5 09*28'5	09.285		138°5	4 W	2	060	16	0 7	7	1011	03		~	2	3	100		5.9	í
S'91°01 7/8	10.1915		138	30 tW	5	060	18	2 9	4.	1012	01		-	2	3	100	3	15.95	1
	09°48'S		139	Z91W	83,0	090	14	83.3 75.	.5	1012	02	8,1	7	7	7	060	1 3	5.9	ı
	09°34'S		139	₩.8±	3	020	0.7	2 6	00	1010	03		7	2	7	100	-		ı
6/9 09*34'S	09*34'S		139°	49'W	83.1	010	12	2 7	2	1011	03	1,8,2	6	2	2	020	1	,	ı
6/9 09°34'S	09*3415		139°	48tW		060	12	2 7	7	1012	02	8,2	7	7	7	060	-	ι	t
.60	09°34'S		139°	50'W		060	12	2 9	2	1012	0.2	00	1	2	7	060	1	ı	,
09 * 34 S	09 * 34 S	34'S	139	.52tW		080	10	2 0	0.	1012	02	×	3	2	2	060	-	t	ı
09*3415	09*34'5		139.	491W		020	14	1 7	0.	1012	0.2	00	7	2	7	060	1	ı	ı
6/9 09*34'5	09.345		139	.48tW	82.5	060	13	4 7	٣.	1011	0.2	80	7	2	7	060	1	ı	ı
6/9 09°34'S 1	09°34'S 1	-	139	139°48¹W		010	14	5 7	4.	1012	03	6,8	2	7	7	060	-	ı	ı
6/9 09*34'S I	09*34'S 1	_	139	39°49'W	82.7	020	12		00	1014	01	8,4	9	2	7	020	7	ł	ě
6/9 09°34'S I	09*34'S	-	139	.50 W	82.8	100	17	2 9	2	1015	15	8'6	9	- 1	7	100	٦,	ı	1
09°34'S I	09°34'S I	-	139	39°50'W		060	60	~	œ.	1014	0.1	8,6		-	71	060	_	ı	

Table 5. --Observations at bathythermograph lowerings, Hugh M. Smith cruise 45 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont¹d)

1	H 3	ı	1	ı	ı	ı	ı	ı	ı	ı	1	ı	t	ı	ı	J	ı	ı	ı	ı	ı	ı	ı	1	ı	ı	ı	ı	ı	ı	ı	1	ı	ı	ı	1
31.10	sal.,		1	ı	ı	i	ı	ı	ı	1	ı	ı	ı	1	ı	i	i	ı	i	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	1
ell	Amt.	-	1	1	1	1	П	п	1	-	П	1	1	7	П	1	1	1	-	-	-	2	7	0	7	-	7	7	г	-	-	Н	-	Н	Н	-
Swell	Dir.	070	020	060	120	120	120	100	100	100	120	120	120	120	130	120	120	110	110	110	130	100	100	080	100	130	120	100	110	110	110	110	110	130	120	130
	Sea	2	2	3	2	7	П	-	Н	Н	-	\vdash	_	Н	\vdash	Н	Н	-	Н	_	H	\mapsto	ы	0	Н	7	7	7	7	Н	Н	\vdash	Н	7	0	-
τελ	Visibil	7	2	7	2	~	7	7	00	9	9	2	2	2	2	9	9	~	2	7	7	9	9	7	9	7	2	7	9	9	7	2	7	9	9	9
	Cover	3	2	1	1	1	6	3	4	9	m	1	П	п	2	2	7	9	6	×	-	-	2	7	3	īŪ	9	Ŋ	1	Н	-	-	6	П	-	-
Clouds	Type		6,8,9	80	80	80	80	1,8		6'8'	6,2,9,8	×	×	00	00	8,1	8,4	00	00	×	σo.	89	00	00	00	œ	80	00	80	80	œ	00	00	œ	00	8,1
	Wea- ther	02	02	01	02	02	03	02	03	15	15	0.1	01	00	00	03	02	01	01	00	00	02	03	02	03	03	02	02	0 1	0.2	02	02	0.2	01	01	02
g g	meter, mb.	1012	1011	1012	1013	1012	1012	1014	1013	1011	1011	1013	1013	1011	1011	1013	1012	1010	1010	1012	1012	1010	1010	1012	1012	1011	1009	1008	1009	1010	1008	1008	1010	1010	1008	1008
emp.	Wet bulb,	76.8	76.2	75.4	75.3	0.97	75.5	76.1	77.4	77.4	76.5		77.0	16.0	0.97	77.0	77.4	77.0	76.1	9	75.3		5	0.97	7	9			76.2			'n	Ď.	9	75.8	6.
Alr temp	Dry bulb,	82.7	81.8	81.6	81.3	0	0	7	7.	\vdash		81.3	81.0	80.2	80.3	82.4	87.8	2.	Ϊ.	80.8	80.0	79.0	6	81.2	2	į.	2.	81.8	81.9	81.8	81.6	Ξ.	2.	2.	83.2	2.
P	Force, kt.	01	10	13	12	14	14	11	11	10	10	10	12	80	12	14	13	10	10	12	60	80	60	10	60	60	08	12	12	10	11	20	11	11	10	10
Wind	Dir.,	050	120	110	120	060	060	100	100	060	120	110	110	110	120	120	120	080	080	100	060	060	060	110	120	100	120	100	110	100	100	110	120	120	120	120
1,0			82.3	2.	82.3	2	2	2	82.9	83.1	82.8	82.3	82.2	81.9		82.0			81.1	2.08	80.2	80.4	0	81.1	81.3	i.	83.0	83.1	82.9	82.8	82.8	82.7	87.8	82.9	83.4	83.2
	Longitude	139°48†W	139°47'W	139°30'W	139°11'W	139°00'W	139°02'W	139°05'W	139°08'W	139°11'W	139°14'W	139°14'W	139°18'W	3 t W	Μ	ΨW	139°34'W	139°37'W	139°40'W	139°40'W	139°42'W	139°43'W	139°44°W	140°02'W	140°03'W	140°10'W	140°30'W	140.50'W	141°04'W	141°22'W	141°40'W	141°59°W	142°11'W	142°23'W	142°35'W	142°48¹W
	Latitude	09"34'S	08°45'S	08°31'S	08°14'S	07°53'S	07°24'S	5,65.90	06.33'S	S,90.90	05°38'S	05°17'S	04°49'S	04.20'S	03°52'S	03°24'S	02.5615	02°29¹S	02.05'S	01°42'S	01*16*5	00 * 48 15	00.2218	00.015	00.00	N,80.00	N,62.00	00°49'N	01.00,IO	N,62.10	01°52'N	02°15'N	02.36'N	N,00.E0	03°24'N	03°46'N
	Date, 1958	6/9	6/13	6/13	6/13	6/13	6/13	6/13	6/13	6/14	6/14	6/14	6/14	6/14	6/14	6/14	6/14	6/15	6/15	6/15	6/15	6/15	6/15	6/15	6/15	6/15	91/9	91/9	91/9	91/9	6/16	91/9	91/9	91/9	6/17	6/17
	Time, GCT	2255									0300	0090	0060	1200	1500		2050		0300		0060	1200	1500	1825	1945	2100	0000	0300	0090	0060	1200	1500	1800	2055	0000	0300
	Ser. No.	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425

Table 5.--Observations at bathythermograph lowerings, Hugh M. Smith cruise 45 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont¹d)

																																				- 1
Surf	РО4-Р, нg at./L.		1	ı	1	1	ı	1	1	ı	ı	ı	ı	1	ı	ı	1	ı	1	ı	ı	ı					ı	1	1	1	1	ı	à		1	-
Surf	sal.,	ı	1	ł	1	1	t	ı	ı	ı	ı	ı	1	1	1	1	1	•	34.07	34.05	34,13	34.36	34,33	34.36	34.45	34.47	34.60	34.60	34.67	34.69	34.67	34.65	34.65		34.54	
11	Amt.	7	-	7			7	1		1	1	1	1	1	7	7	1	1	7	2	2	7	1	3	3	m	3	3	3	3	3	3	3	3	3	
Swell	Dir.	110	110	120	120	080	060	060	060	060	060	080	020	090	090	020	050	040	030	030	030	030	040	040	020	020	020	020	020	020	090	090	020	020	020	050
	Sea		_	_		_	_		7	7	2	7	7	2	_	7	2	7	2	7	7	7	3	4	4	3	3	3	3	3	3	3	3	3	3	3
ήį	lidiaiV	2	7	~	9	9	r,	2	2	2	~	9	9	9	~	2	2	9	9	7	~	9	7	9	9	2	2	9	2	2	9	~	2	9	7	9
qs	Cover	1	1	2	7	80	7	00	9	×	×	2	2		4	3	2	2	2	9	5	7	7	τ,	9	4	2	4	9	80	πυ		9	9		2
Clouds	Type	∞	8	00	9	9,8,6		6,9,8	8,9	×	×	∞	8,6	4,1,9,8	4,	80	∞	8	8,9	8		4,8,9	8	2,	2,7,4	1,8	×	×	8	7	8	1,3,4,8	6,	8,9	8	8
	Wea- ther	0.2	02	03	25	81	25	80	15	00	25	0 1	15	15	02	0.1	0.1	02	13	20	20	25	15	16	16	01	0.1	00	03	09	0.1	02	03	03	01	0.1
B3 #0 -	meter, mb.	1010	1010	1009	1009	1011	1011	1010	1010	1011	1012	1010	1010	1012	1012	1011	1010	1012	1012	1012	1011	1012	1012	1012	1011	1013	1014	1013	1013	1014	1015	1014	1014	1015	1016	1015
temp.	Wet bulb,		76.2				7.92	77.0	77.1	7	77.0	~	8.92	8.77	77.7	77.1	77.0	8.92	75.4	0.97	77.0	9.77	78.0	77.8	77.6	77.0	76.1	0.97	75.6	75.3	74.3	74.0	73.2	72.5	72.0	72.0
Alr te	Dry bulb,	82.1	81.8		82.5		78.8		80.3		0	$\vec{}$	81.7	5	83.0	2	72	9	81.3	7	٦.	9	4		3	0	78.5	77.7	78.0	78.3	78.0	78.3	78.2	6.77	77.2	77.1
T	Force, kt.	12	12	13	16	12	07	03	90	11	12	15	10	60	60	60	11	14	14	14	16	16	18	21	20	22	22	16	22	2.1	2.1	22	20	20	20	18
Wind	Dir., F	130	130	130	060	060	220	290	110	120	110	060	100	080	090	090	050	040	040	030	030	050	040	050	090	020	050	050	050	090	090	050	050	070	080	070
Rice	:	0	3.1		.3	6.	0	0.		٠5	. 1	7.	6.	8.	0.	.2	0	2	4.	0.	5	0.	2.0		.1	٦.		2.	9.	2.	4.		0	78.0	6.2	7.8
_ m	ten.	80	8	8	80	8	00	80	8	8	8	8	8	8	80	8	00	80	82	8	00	00	8	8	8	8	7	7	7	7	79	7	7	7	7	7
	Longitude	142°58'W	143°10'W	143°23'W	143°36'W	143°48'W	144°02'W	144°12'W	144°25'W	144°40'W	144°48'W	145°03'W	145°19'W	145°37'W	145°54'W	146°10'W	146°26'W	146°43'W	146°55'W	147°14'W	147°34'W	147°54'W	148°13'W	148°30'W	148°47'W	149°03'W	149°14'W	149°32'W	149°50'W	150°05'W	150°22'W	150°39'W	150°54'W		151°22'W	151°38'W
	Latitude	04°02'N	04°23'N	04°45'N	N,90.50	05°27'N	05°48'N	N, 20.90	06°28'N	06°48'N	N,00.20	N161.20	07°37'N	07°57'N	08°16'N	08.35'N	08°53'N	09°13'N	09°31'N	09°53'N	10°16'N	10°38'N	11°00'N	11°21'N	11°40'N	12°02'N	12°18'N	12°38'N	12°58'N	13°18'N	13°38'N	13°59'N	14°20'N	14°41'N	14°58'N	15°20'N
	Date, 1958	6/17	6/17	6/17	6/17	6/17	6/17	6/18	6/18	6/18	6/18	6/18	81/9	6/18	6/18	6/19	6/19	6/19	6/19	6/19	6/19	6/19	6/19	6/20	6/20	6/20	6/20	6/20	6/20	6/20	6/20	6/20	6/21	6/21	6/21	6/21
	Time, GCT	0090	0060	1200			2100	0000		0090	0855	1200	1500	1800	2100	0000	0300	0090	0060	1200	1500	1800	2100	0000	0300	0090	0060	1200	1500	1800	2100	0000	0300	0090	0060	1210
	Ser. No.	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460

Table 5..-Observations at bathythermograph lowerings, Hugh M. Smith cruise 45 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

_		1																
Surf.			ı	1	4	1	ł	1	1	t	1	1	ı	1	ı	ł	ł	ı
Surf.	sal.,	34.63	34.61	34.60	34.69	i	ı	ı	ı	ŧ	ı	1	ŧ	1	1	ı	ı	1
111	Amt.	-	7	3	2	2	1	7	1	1	1	1	ч	~	Н	1	-	-
Swell	Dir.	050	020	020	030	020	050	010	050	050	040	040	060	280	280	XXX	090	090
	Sea	m	2	3	3	~	2	2	7	7	2	7	2	_	_	Т	~	~
ity	lidisiV	9	Ŋ	2	9	~	9	9	9	<u></u>	7	2	7	7	9	8	8	00
ds	Cover	3	7	3	2	3	2	2	4	3	1	2	3	ιΩ	7	2	3	5
Clouds	Type	8,4	0,6,8	4,6,8	6,8	8,9	8	8	0	1,6,8	8,9	6,8	6,8	4,6,8	4,6,8	4,8	8	00
	Wea- ther	0.3	20	0.1	0.2	03	0.1	0.2	50	02	0.1	03	03	15	03	0.1	00	03
Baro-	meter, mb.	1015	1017	1016	1015	1015	1015	9101	1015	1015	9101	1016	1015	1013	1014	1015	1014	1014
emp.	Wet bulb,	70.8	71.6	71.5	71.1	71.0	2.69	71.2	71.0	70.0	71.3	74.0	71.6	72.2	71.0	70.3	71.9	70.1
Air temp.	Dry bulb,	Ì		77.0								77.4	77.9	77.8	77.2	77.0	76.2	75.4
pu	Force, kt.	16	16	19	15	16	16	15	60	60	13	13	18	04	13	60	17	12
Wind	Dir., °T.	020	040	090	050	050	050	0.40	050	050	090	090	120	230	230	320	0.40	010
Bkt.	temp.,	77.8	77.1	77.0	77.1	77.2	77.1	77.1	6.92	6.92	77.1	77.1	77.7	78.2	77.9	77.5	77.6	77.0
	Longitude	151°55'W	152°12'W	152°30'W	152°50'W	153°15'W	153°40'W	153°56'W	154°19'W	154°42'W	155°06'W	155°30'W	155°51'W.	156°08'W	156°26'W	156°40°W	156°56'W	157°12'W
	Latitude	15°41'N	16°03'N	16°26'N	16°43'N	N,65.91	17°14'N	17°29'N	17°46¹N	18°04'N	18°22'N	18°40'N	18°58'N	19°16'N	19°36'N	19°52'N	20°14'N	Z0.36'N
ļ	Date, 1958	6/21	6/21	6/21	6/22	6/22	6/22	6/22	6/22	6/22	6/22	6/22	6/23	6/23	6/23	6/23	6/23	6/23
Ē	Ser. 11me, Date, No. GCT 1958			2100				0060		1500			0000				1200	
ξ	Ser. No.	461	462	463	464	465	466		468	469	470	471	472	473	474	475	476	477

Table 6. --Weather observations (USWB 1210-F), Charles H. Gilbert cruise $35\frac{1}{}$

					7	Wind		ea-	Pr	essı	ıre	Te	emper	ature		C	Clou	ıds			W	aves	1
Date, 1957	Latitude	Longitude	Time, GCT	Visibility	Direction	Speed, kt.	Present	Pant	Bar, corr., mb.	Characteristic	Amt, change	Dry buib, °F.	Wet bulb, oF.	Sea water, oF.	Total amount	Amount low	Type low	Height low	Type middle	1 ype nign	Direction	Period Helght	
10/4	18.9°N	155.9°W	0000	99	11	10	03	1	1011.9	7	2.7	80.0	74.5	80.2	5	5	4	6			11	2 2	_
10/4	18.2°N	155.5°W	0600	97	80	13	0.0	1	1013.5	1		79.9	75.0	79.2	3	3	1	5			11	2 2	
10/4 10/4	17.4°N 16.7°N	155.1°W	1200	99 98	08	14 15	00	0	1012.5	7 2	1.4	78.0 80.0	73.8 73.8	78.0 79.4	X 3	X	X 1	X 5			09 09	2 3 2 3	
10/4	15.9°N	154.0°W	0000	99	07	10	02	0	1011.2	7	2.0	80.5	75.0	80.0	3	3	4	5			09	2 3	
10/5	15.2°N	153.5°W	0600	97	06	13	02	0	1011.5	3	0.7	80.0	75.0	79.7	3	3	8	5			09	2 3	
10/5	14.4°N	153.1°W	1200	99	08	15	02	0	1010.2	7	1.4	81.0	75.0	81.3	3	3	8	5			09	2 3	
10/5	13.7°N	152.7°W	1800	98	08	14	03	1	1012.5	2	2.0	81.3	76.0	81.1	8	8	8	5	X.	x	10	2 3	
10/6	12.9°N	152.3°W	0000	98	05	04	03	2	1009.8	7		81.6	77.0	82.1	8	8	8	5	X.		10	2 3	
10/6	12.2°N	151.8°W	0600	97	08	06	16	6	1012.2	2	2.0	81.0	76.0	82.2	8	8	8	5	X	X	10	2 2	
10/6	11.4°N	151.4°W	1200	97	10	10	16	2	1010.8	7	1.4	81.0	76.0	81.5	8	8	8	5	X.	X	10	2 2	
10/6	10.7°N	150.9°W	1800	97	09	09	14		1012.5	2	2.4	83.0	77.0	82.1	8	8	4	5	X.	X	09	2 2	
10/7	09.9°N	150.4°W	0000	97	09	07	02	2	1010.5	6		81.6	76.1		8	8	8	5	X	X	10	2 2	
10/7	09.1°N	150.0°W	0600	97	09	14	02	2	1012.9	1		80.3	76.0	82.2	8	8	8	5				2 2	
10/7	07.7°N	149.0°W	1800	97	15	13	02	2	1012.9	1		84.0	77.2	83.0	6	6	8	5				2 2	
10/8 10/8	07.0°N 06.4°N	148.6°W 148.2°W	0000	99 99	12 13	12 08	02	1 1	1009.1	7 2	2.0	83.8	77.3		4	4	1	5			14	2 2 2	
10/8	05.7°N	140.2 W	1200	97	11	10	01	1	1011.5	6		81.8	78.0 75.3	82.3	5 2	5	4	5	_	_	13 13	2 2 2	
10/8	05.0°N	147.3°W	1800	99	13	14	02	0	1012.9	2		82.0	76.0	81.0	4	4	2	4	_	_		2 2	
10/9	04.3°N	146.9°W	0000	99	15	11	02	I	1009.1	7		82.0	74.8	81.8	4	2	1	4				2 2	
10/9	03.6°N	146.6°W	0600	99	13	10	02	1	1011.5	2	2.4	81.3	74.0	81.2	1	1	1	4	0	0	12	2 2	
10/9	02.9°N	146.2°W	1200	97	15	11	02	0	1010.5	6		80.0	74.0	80.4	3	1	1	4				2 2	
10/9	02.2°N	145.8°W	1800	99	15	09	02	0	1012.5	2	1.7	81.0	76.0	80.6	1	1	1	4	0	0		2 2	
10/10	01.5°N	145.4°W	0000	99	15	19	03	1	1009.5	6	1.0	80.8	75.1	80.1	8	4	8	4	3	0	14	2 2	
10/10	00.8°N	144.9°W	0600	99	12	10	01	1	1011.9	2		81.0	75.0	79.7	1	1	2	5	0	0	14	2 2	
10/10	00.0	144.4°W	1200	97	11	10	02		1010.2	6		79.3	75.8	79.1	3	3	1	5				2 2	
10/10	00.7°S	144.0°W	1800	99	13	11	02	0	1011.9	2		81.0	76.3	79.7	3	4	1	4				2 2	
10/11	01.5°S 02.4°S	143.6°W	0000	99 99	12 11	09 13	02	0	1008.8	6		80.0	75.0	80.0 79.9	2	3	1	4				2 2	
10/11	02.4 S	143.3°W	1200		11	13	02		1011.5	1 5		81.2 79.7	75.3 75.1	79.9	8 5	8	2	4				2 2 2	
•				, .			V =	-	.011.3		0.1	1 / • 1	13.1	17.5	,		_	-1			13	4 6	
10/11	04.0°S	142.8°W	1800	99	11	15	01		1013.5	1		81.2	75.3	79.9	0	0		9	0 (0		2 2	
10/12	04.8°S	142.5°W	0000	99	12	12	02		1009.1	7		80.6	75.3	80.4	0	0	0	9				2 2	
10/12	05.6°S	142.2°W	0600	99	10	11	02		1011.5	2		81.0	75.3	80.3	0	0	0	9				2 2	
10/12	06.2°S	141.8°W	1200 1800	97 99	11	07 09	01		1011.2	6		80.0	73.0	80.5	1	1	1	_	-	-		2 2	
10/12	06.9°S	141.4°W	0000	99	10	09	02		1014.2	1		81.2	74.3	81.0	1 1	1	1	4		_		2 2 2 2	
10/13	08.3°S	141.0 W	0600	99	09	14	02		1011.3	1		82.5	75.5	81.7	1	1	I	4				2 2	
10/15	08.2°S	140.8°W	0000	99	09	07	01		1011.5	7		82.2	75.3	82.3	4	4	2					2 2	
10/18	09.8°5	138.9°W	0000	97	06	15	25		1010.5	6		82.3	78.2	82.0	8	8	2		x :		-	2 2	
10/19	10.4°S	138.8°W	0000	98	13	17	03	1	1010.8	7			75.0		6	6			1 (2 3	
																							_

 $\frac{1}{2}$ All columns in USWB 1210-F are not included here. Those deleted are:

Column 2 Day of week
3 Octant
13 Barometer as read
14 Barometer as corrected
17 Air temperature, °F.

Column 23 Course of ship

'' 24 Speed of ship

ead '' 31 Diff. sea-air, °F.

orrected '' 32 Dew point, °F.

Table 6. -- Weather observations (USWB 1210-F), Charles H. Gilbert cruise 35 (cont'd)

					٧	Vind		ea-	Pre	essu	re	Te	mper	ature		C	lou	ıds			w	ave	e s
Date, 1957	Latitude	Longitude	Time, GCT	Visibility	Direction	Speed, kt.	Present	Past	Bar, corr., mb.	Characterletic	Amt, change	Dry bulb, oF.	Wet bulb, oF.	Sca water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
10/22 10/24 10/25 10/25 10/25 10/25 10/26 10/26 10/26	09.6°S 09.1°S 09.1°S 09.2°S 09.4°S 09.4°S 09.3°S 09.3°S 09.2°S 09.2°S	139.8°W 139.2°W 138.8°W 138.1°W 137.4°W 136.7°W 136.0°W 136.1°W 136.5°W 137.3°W	0000 1800 0000 0600 1300 1800 0000 0600 1300 1800	97 99 99 97 97 99 97 97	05 09 09 07 09 09 09 09	12 16 13 09 10 12 09 12 12 12	25 02 02 02 01 02 02 02 03 02	1 0 8 1 0 0	1011.5 1012.2 1012.2 1014.6 1010.5 1015.9 1012.2 1014.6 1012.5 1014.9	7 1 7 1 5 1 7 1 5	1.4 2.4 2.0 0.7 1.4 2.4 2.0	82.2 82.2 81.2 80.4 81.3 82.2 81.7	75.3 76.0 76.3 75.7 75.4 74.3 74.5 74.7 73.9 75.0	80.7 81.7 80.3	8 4 4 2 4 1 2 4 6	8 4 4 2 4 1 2 4 6	7 1 1 2 2 2 1 1 2 2	4 4 4 4 4 4 5	X 0 0 0 0 0 6 0 0 0	X 0 0 0 0 0 0 0	05 09 09 09 09 09 09	2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2
10/27 10/27 10/27 10/27 10/28 10/28 10/28 10/28 10/29 10/29	09.3°S 09.3°S 09.3°S 09.6°S 10.2°S 11.4°S 12.0°S 12.6°S 12.6°S	138.0°W 138.8°W 139.2°W 139.6°W 139.6°W 139.6°W 139.5°W 139.6°W 139.6°W	0000 0600 1300 1800 0000 0600 1300 1800 0000 0600	99 97 97 99 97 96 99 99	08 10 09 07 09 09 09 07 09 08	10 12 10 15 16 15 05 16 15	02 02 03 03 02 25 01 01 02	1 8 1 2 1 8 1	1011.9 1013.9 1012.5 1014.9 1011.9 1014.6 1013.5 1015.6 1012.9 1014.6	6 1 5 2 7 1 3 1 6 2	1.7 0.2 1.7 1.7 1.7 0.7 1.7	83.0 81.1 81.1 81.8 82.0 81.3 78.2 82.2 82.5	76.0 74.1 75.9 75.2 76.3 76.0 74.9 76.0 75.5	81.4 81.8 82.0 81.7 82.0	7 2 2 6 4 3 7 4 4 4	7 2 6 4 3 7 4 4	2 2 4 2 2 2 2 2 2 2	5 4 4 4 4 4 4 4 4 4 4	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	09 09 09 08 09 09 09 08 09	2 2 2 2	2 2 2 2 2 2 2 2 2
10/29 10/29 10/30 10/30 10/30 11/1 11/2 11/2 11/2	12.2°S 11.6°S 11.0°S 10.2°S 09.6°S 08.9°S 08.1°S 07.5°S 07.1°S 06.5°S	139.4°W 139.4°W 139.5°W 138.7°W 139.7°W 139.6°W 139.6°W 139.6°W 139.5°W	1300 1800 0000 0600 1300 1800 0600 1300 1800	96 97 98 97 97 99 97 96 98	08 12 07 08 08 08 08 08 10	18 14 18 17 17 20 16 16 16	02 14 03 02 01 02 03 02 02 02	8 1 2 1 0 1 1 2	1013.5 1015.2 1011.5 1013.2 1011.2 1013.9 1009.8 1011.9 1010.2	6 1 7 2 6 0 7 2 5	1.7 1.4 1.4 1.4 0.0 1.7 1.4	80.0 81.0 81.5 81.1 83.5	75.2 74.0 76.0 76.3 75.9	81.8 81.5 81.3 81.0	4 6 7 5 1 2 6 4 4 4	4 6 7 5 1 2 6 4 4 4	2 4 4 2 6 1 2	4 4 4 4 4 4 4 4 4	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	09 10 09 09 09 08 08 08	2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2
11/3 11/3 11/3 11/3 11/4 11/4 11/4 11/4	08.4°S 08.9°S 09.2°S	139.7°W 139.8°W 139.8°W 139.6°W 139.6°W 139.5°W 140.0°W 140.6°W 141.3°W	0600 1300 1800 0000	96 96 98 97 97 99	10 09 09 09	17 09 14 10	02 02 01 02 15 01 02 02 02	0 0 0 1 1 0 0	1013.5	2 5 1 7	2.4 0.3 1.4 0.7 2.0 0.0 0.7 2.0	81.5 80.5 84.0 84.0	75.0 74.8 74.7 76.2 76.2 75.1 74.0 75.0 75.0 76.0	80.9 81.3 81.8 82.0	1 2 2 1	1 2 2 1	1 1 2 2	4 4 4	0 0 0	0 0 0	08 08 08 08 10 10 09 09	2 . 2 . 2	2 2 2 2 2 2 2 2 2
11/5 11/5 11/6 11/6 11/6 11/6 11/7 11/7 11/7	09.2°S 09.2°S 09.2°S 09.3°S 09.3°S	142.0°W 142.3°W 143.4°W 143.0°W 142.3°W 141.8°W 141.3°W 140.7°W 140.1°W 140.7°W	0000 0600 1300 1800	99 99 97 97 99 99	09 09 11 09 08 08 09	15 09 14 12 18 09 12 14	01 02 02 02 01 02	0 0 0 0 0 0 0	1012.5 1008.8 1010.8 1009.5 1012.2 1008.8 1010.8	2 7 2 5 2 7 1 6	1.7 2.0 1.0 0.0 2.4 2.0 1.4	85.0 85.0 82.5 81.8 82.5 83.8 81.4 80.8	75.0 76.2 76.0 76.0 75.0 75.0 74.2 74.1 74.0 76.0	82.5 83.1 82.0 82.0 81.6 81.4 81.5 80.8	1 3 4 4 1 1 1	1 3 4 1 1 1 4	2 1 1 2 2 8 4	4 4 4 4 4 4	0 0 0 0 0 0	0 0 0 0 0 0	09 09 09 09 09 09 09	2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2

Table 6. -- Weather observations (USWB 1210-F), Charles H. Gilbert cruise 35 (cont'd)

	Т				T		T w	ea-		-		1			Ι								
					1	Vind	1	her	Pr	essu	re	Te	emper	ature	_	С	lot	ıds			W	av	ев
Date, 1957	Latitude	Longitude	Time, GCT	Visibility	Direction	Speed, kt.	Present	Past	Bar, corr., mb.	Characteristic	Amt. change	Dry bulb, OF.	Wet bulb, °F.	Sea water, °F	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
11/9 11/9 11/9 11/9 11/10 11/10 11/10 11/11 11/11	10.0°S 10.8°S 11.5°S 12.1°S 12.7°S 13.3°S 14.3°S 14.6°S 14.9°S	141.3°W 141.9°W 142.4°W 143.0°W 143.8°W 144.5°W 145.0°W 145.9°W 146.3°W 147.2°W	1800 0000 0600 1200	99 97 98 99	11 11 11 08 07 07 08 00 14 13	16 16 18 11 11 09 07 00 07	01 01 02 02 01 00 02 15 02	0 0 0 0 0 0 1	1007.8 1009.5 1009.1 1012.2 1009.1 1010.5 1009.5 1012.2 1012.5 1010.5	7 2 7 2 6 2 7 2 1 6	1.4 0.9 1.4 1.4 0.7 1.0 2.0 1.4	81.5 83.0 84.8 84.8 81.9 82.2 83.4		82.0 82.6 83.7 82.6 82.3 82.8 83.4	2 2 4 2 9 2 6 2 4	2 2 4 2 X 2 6 2	1 2 4	4 X 4 4	0 0 0 X 0 0	0 0 0	15 13 14 13 12 10 10 09 00 13	2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 0
11/12 11/13 11/13 11/14 11/14 11/14 11/19 11/19 11/19	14.9°S 15.0°S 15.2°S 15.9°S 16.5°S 17.0°S 17.4°S 16.8°S 16.3°S 15.8°S	148.0°W 148.0°W 148.0°W 148.3°W 148.7°W 149.1°W 149.4°W 148.8°W 148.2°W 147.6°W	1800	98 98 98 98 96	11 13 04 02 04	14 16 15 12 14 15 08 08 08	02 02 25 15 00 01 15 00 00	1 8 2 0 0 8 X 8	1013.2 1010.8 1012.5 1010.2 1012.5 1009.8 1010.5 1011.9 1010.5	2 7 1 6 2 7 6 2 6 1	1.7 1.4 1.4 1.4 2.0 1.4 1.7	82.5 81.9 82.0 80.0 79.5 81.4 83.0 81.1	77.0 76.2 75.3 74.0 72.5 72.8 77.0 78.0 76.5 77.0	83.0 82.5 82.0 80.5 79.3 81.1 81.2 81.3	4 2 4 7 X 2 6 9 5 3	4 2 4 7 X 2 6 X 5 3	2 8 X 1 2 X	4 4 X 4 4 X	0 0 0 X 0 0 X	0 0 X 0 0 X X	10 15 15 15 11 12 07 07 07 08	2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2
11/20 11/20 11/20 11/20 11/21 11/21 11/21 11/21 11/22 11/22	15.3°S 15.0°S 14.6°S 14.1°S 13.5°S 12.9°S 12.4°S 11.8°S 11.2°S 10.6°S	147.0°W 146.4°W 145.7°W 145.1°W 144.5°W 143.9°W 143.4°W 142.8°W 142.2°W 141.7°W	1200 1800 0000 0600	97 94 97 98 98 94 99	05 04 06 35 04 04 03	10 08 04 13 06 09 12 13 09	02 16 00 16 02 01 01 02 02	1 8 8 2 1 0 0	1009.1 1010.5 1009.1 1011.5 1009.1 1011.5 1010.2 1012.5 1009.8 1012.5	2 7 2 7 2 6	1.7 1.4 1.4 1.4 2.0 1.4 1.7	80.0 81.1 79.0 82.2 83.0 82.3 83.2 83.5	76.9 76.2 75.1 75.0 76.8 76.0 75.1 76.5 75.6 76.3	82.5 82.9 82.3 84.0 82.6 82.9 82.0 83.1	5 6 7 7 0 2 2 3 3	3 5 6 7 2 0 2 2 2 3	X X 2 1 0 1 1	X 4 4 9 4 4	X 2 1 0 0 1	X 0 0 0 0 0	05 07 07 07 00 00 00 04 04 06	2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2
11/29	10.1°S 09.4°S 09.5°S 09.6°S	141.1°W 140.6°W 139.7°W 139.5°W 139.1°W 139.9°W 139.8°W 139.8°W 139.8°W	0000 0000 1800 0000 0600	99 99 99 99 99 99	07 10 05 06 04 07	09 10 07 07 09	03 02 02 02 03	0 0 0 1 0 0 0	1009.8 1007.8 1011.2 1008.5	1 7 7 7 7 2 7 2	1.7 2.0 1.4 2.4 1.4 1.4 2.7	81.0 81.9 82.5 84.0 82.9 82.9 83.5 81.1	76.2 75.4 76.0 76.8 76.2 75.1 76.2 75.7	81.9 82.1 82.8 83.1 81.5 83.5 82.0	6 2 2 2 4	6 2 2 2 4	4 1 2 2 2 2 2 4	4 4 4 4 4 4	0 0 0 0 0 0	0 0 0 0 0 0	05 06 07 12 06 06 08	2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2
12/4 12/5 12/5 12/5 12/5 12/6 12/6 12/6 12/7	07.1°S 06.4°S 05.7°S 04.9°S 04.2°S 03.5°S 02.6°S 01.8°S	140.7°W 141.1°W 141.6°W 142.1°W 142.5°W 143.0°W 143.4°W 143.6°W 143.9°W 144.2°W	0000 0600 1200 1800 0000 0600 1200 1800	99 99 97 99 99 99	05 06 05 09 08 06 07	13 13 17 19 13 15 13	02 01 03 02 02 01 02 02	2 1 1 1 1 1 1	1013.5 1010.5 1013.2 1011.2 1013.5 1010.5 1012.5 1011.9 1013.5 1010.8	7 2 7 1 7 2 7 2	1.4 2.4 1.4 1.4 2.4 2.4 2.0	83.0 82.0 81.1 82.2 82.5 82.2 81.8 83.0	76.0 76.0 76.2 76.6 76.5 76.5 76.0 77.0	82.2 81.8 81.3 81.5 82.3 81.9 81.8	2 5 4 5 2 4	7 2 5 4 5 2 4	4 1 2 2 4 2 I 1	4 4 4 4 4 4 4	0 0 0 3 0 0 0	0 0 0 0 0 0	05 06 06 06 07 07 07	2 2 2 2 2 2	2 2 2 2 2 2 2 2 2

Table 6. -- Weather observations (USWB 1210-F), Charles H. Gilbert cruise 35 (cont'd)

					V	Vind	l .	ea- her	Pr	essu	ıre	Te	mper	ature			lou	ıds			W	ave	в
Date, 1957	Latitude	Longitude	Time, GCT	Visibility	Direction	Speed, kt.	Present	Past	Bar, corr., mb.	Characteristic	Amt, change	Dry bulb, °F.	Wet bulb, OF.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Heignt
12/7 12/7 12/7 12/8 12/8 12/8 12/8 12/9 12/9 12/9	00.3°S 00.5°N 01.1°N 01.9°N 02.6°N 03.3°N 04.1°N 04.8°N 05.6°N 06.4°N	144.6°W 145.0°W 145.4°W 145.9°W 146.4°W 146.9°W 147.4°W 147.8°W 148.2°W 148.6°W	0600 1200 1800 0000 0600 1200 1800 0000 0600 1200	97 97 98 99 97 97 97 98 99	13 13 14 12 13 11 12 09 07 05	07 14 14 13 09 10 10 05 07	21 01 03 02 02 15 52 03 01	6 8 1 2 2 8 8 8 2 2	1013.9 1012.5 1014.2 1010.8 1013.5 1011.5 1013.9 1009.8 1011.5 1010.2	2 7 2 7 2 7 1 7 2 8	2.0 1.4 2.0 2.0 2.0 2.0 3.1 1.7	78.0 81.9 83.2 82.9 83.0 81.5 78.8 82.1 82.0 81.5	77.0 76.1 76.0 77.0 77.5 76.8 76.3 77.9 77.2 75.5	81.8 81.9 82.3 83.1 82.0 82.5 82.0 82.9 82.2	8 4 6 4 6 5 8 6 4	8 4 6 4 6 5 8 6 4	4 2 2 2 2 2 2 4 4	4 4 4 4 4 4 4 4 4 4	X 0 3 0 1 0 2 X 0 0	X 0 0 0 0 0 X X 0	13 13 14 13 13 13 13 11 11	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
12/9 12/10 12/10 12/10 12/10 12/11 12/11 12/11 12/11 12/11	07.1°N 07.9°N 08.6°N 09.4°N 10.2°N 11.0°N 11.7°N 12.4°N 13.1°N 13.8°N	148.9°W 149.4°W 149.9°W 150.3°W 150.8°W 151.3°W 151.8°W 152.4°W 153.0°W 153.5°W	1800 0000 0600 1200 1800 0000 0600 1200 1800 0000	99 98 98 96 98 99 97 99	06 06 06 07 08 08 06 06	06 12 16 13 15 16 17 19 18	02 16 00 02 03 02 00 02 02 02	0 2 X 1 2 2 X 2 2 2 2	1011.5 1008.8 1011.2 1010.5 1013.2 1009.8 1012.2 1011.2 1012.5 1011.2	2 7 2 7 2 7 2 8 2 7	1.7 1.7 1.0 2.0 2.0 2.0 1.4	83.5 80.5 81.0 81.2 81.1 81.5 80.1 80.0	76.0 77.1 76.5 76.4 76.5 77.3 76.0 76.1 76.0	82.8 83.5 82.1 82.0 80.5 80.9 80.0 80.1 79.8 80.1	4 8 X 5 8 7 4 7 6 8	4 7 X 4 8 5 4 3 6 5	2 2 X 2 1 2 X 2 1 2	4 4 X 4 4 X 4 4 4 X 4	6 2 X 1 4 3 X 5 5 2	1 X 0 X 0 X 0 X	06 02 06 05 02 03 05 04 05	2 2 2 2 2 2 3 4 3 4 3 3 3 3 3 3 3 3	2 2 2 2 4 4 4 3 3
12/12 12/12 12/12 12/13 12/13 12/13 12/13	14.6°N 15.3°N 16.1°N 16.8°N 17.5°N 18.3°N 19.1°N	153.9°W 154.4°W 154.8°W 155.3°W 155.6°W 156.0°W 156.2°W	0600 1200 1800 0000 0600 1200 1800	98 94 97 96 98 96	06 04 04 05 05 05	22 24 28 22 22 22 07	00 03 03 02 00 00	X 2 2 2 2 2 1	1013.5 1012.9 1013.9 1012.5 1013.9 1013.2 1014.2	2 7 2 7 2 7 1	1.2 1.7 1.0 1.4 1.4	79.0 77.0 77.0 76.5 75.5 74.1 75.5	74.0 73.0 74.0 69.1 69.0 68.0	79.2 77.9 77.8 77.8 77.3 76.1 76.9	9 8 8 8 8 6	X 8 8 8 X 4 1	X 2 2 4 X 1 2	X 4 4 4 X 4				3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3 5 5 5

Table 7. --Weather observations (USWB 1210-F), Hugh M. Smith cruise $43\frac{1}{}$

					ν	/ind		ea- her	Pr	essu	re	Te	mpera	ature		Clo	uds		ν	Vaves
Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Direction	Speed, kt.	Present	Past	Bar, corr., mb.	Characteristic	Amt, change	Dry bulb, °F.	Wet bulb, ^o F.	Sea water, °F.	Total amount	Amount low Type low	Height low	Type middle	Direction	Period Height
1/4 1/4 1/4 1/5 1/5 1/5	21.6°N 21.6°N 22.3°N 21.8°N 21.1°N 20.5°N 19.5°N	158.6°W 158.4°W 157.9°W 157.9°W 157.5°W 157.0°W 156.6°W	0600 1200 1800 0000 0600 1200 1800	98 97 98 98 97 98	01 31 36 34 35 02	25 26 23 21 26 22 20	03 02 03 01 03 00	2 2 2 1 1 1	1018.3 1016.6 1018.3 1016.6 1017.3 1018.0	1 7 2 6 3 5	0.7 2.0 2.7 0.7	68.2 68.1 68.4 69.3 70.2 70.3 72.0	63.0 60.2 59.2 60.0 62.9 62.7 65.0	74.0 73.0 72.2 73.0 73.5 74.2 74.8	X 6 2		4 4	X 6 6 X 6	X 32 X 32 0 32 0 34 X 34 0 34 0 34	3 8 3 8 3 3 3 3 3 4
1/6 1/6 1/6	18.8°N 18.1°N 17.3°N	156.2°W 155.7°W 155.2°W	0000 0600 1200	99 97 98 98	36 06 03	07 19 21	02 03 80	1 1 1 5	1015.9 1016.6 1017.6	6 2 7	3.1 1.7 1.4	73.8 72.9 73.7	66.4 65.4 65.7	76.4 75.5 75.9	3 7	2 1 X X 2 1	5	3 X 3	0 34 X 02 0 35	3 2 3 3 X 3
1/7 1/7 1/7 1/7 1/8 1/8	15.8°N 15.1°N 14.3°N 13.6°N 12.9°N 12.7°N	154.4°W 153.9°W 153.5°W 153.0°W 152.5°W 152.2°W	0000 0600 1200 1800 0000 0600	98 98 98 98 98	07 06 06 04 07 06	15 19 16 17 17	01 01 15 01 03 01	1 0 1 1 0 2	1016.3 1017.3 1016.3 1016.3 1013.2	7 2 7 2 7 2	1.7 1.7	74.6 75.5 75.8 76.3 77.4 78.2	68.6 68.7 70.6 71.8 72.2 73.8	76.2 77.1 76.9 77.3 78.5 78.6	5 2 3	4 1 X X 4 1 2 4 3 4 X X	5 5 5	X 6 0	0 02 X 04 0 03 0 04 0 03 X 06	3 3 X 3 2 5 2 4
1/8 1/8 1/8 1/9	11.6°N 11.0°N 10.1°N	151.9°W 151.6°W 151.2°W	1200 1800 0000	98 98 98 98	08 07 07	16 18 18	01 01 02 01	1 0 0	1013.9 1013.2 1014.2 1010.5	6 2 7	1.4	78.2 79.0 79.7 80.3	74.0 74.0 73.8 75.1	78.3 78.5 79.3	2 2 2	2 1 1 8 2 1 X X	5 5 6	0 6 0	0 05 0 07 0 06 x 07	3 3 3 3 3 3
1/9 1/9 1/10 1/10 1/10	08.8°N 08.1°N 07.5°N 06.7°N 06.1°N 05.5°N	150.3°W 150.0°W 149.4°W 149.0°W 148.6°W	1200 1800 0000 0600 1200	97 98 98 98 97	08 07 06 04 03	19 24 18 19 20	03 01 03 03 25	1 0 1 1 2 6	1010.8 1012.5 1009.8 1011.2 1010.2	7 2 7 2 6	1.7 2.7 1.0 2.0	79.5 81.0 81.6 81.8 78.3	74.0 74.0 75.7 76.8 77.3	79.2 81.4 82.3 81.7 82.8	3 7 7 9	4 4 3 8 4 8 X X X X		0 6 X X	0 07 0 07 8 07 X 07 X 07	3 5 3 5 3 4 3 3
1/10 1/11 1/11 1/11	04.8°N 04.0°N 03.6°N	149.2°W 147.0°W 147.3°W 146.9°W	1800 0000 0600 1200	95 95 96 96	07 10 12	28 18 17	63 60 02 02	5 2 2	1012.9 1010.2 1011.2 1009.8	1 7 1 7	1.7 1.4 1.7	77.2 79.0 83.1 82.1	75.5 77.0 77.0 76.2	82.3 82.5 82.4 82.4	8 8 9	8 7 X X	4 X	0 X X	0 07 0 07 X 11 X 49	3 4 3 3
1/12 1/12 1/12 1/12 1/13 1/13	02.0°N 01.3°N 00.6°N 00.0° 00.9°S 01.6°S	146.2°W 145.9°W 145.6°W 145.3°W 144.9°W 144.5°W	0000 0600 1200 1800 0000 0600	97 97 97 98 98	12 11 11 10 11	15 19 18 14 17	02 01 01 03 02 01	2 1 0 1 1	1008.8 1011.2 1009.8 1011.5 1008.1 1010.5	7 1 7 1 7 2	2.4 2.0 2.4 3.1	82.7 81.8 81.0 82.4 82.5 81.7	76.0 77.0 75.5 76.3 75.7 75.8	82.6 82.0 81.6 81.9 82.2 82.2	2 9 5 2	6 7 X X X X 2 1 1 8 X X	X 4 5	X X 0 0	2 11 X 12 X 49 6 09 6 09 X 11	X X 3 3
1/13 1/13 1/13 1/14	02.3°S 03.0°S 03.8°S	144.1°W 143.7°W 143.3°W	1200 1800 0000	97 98	11 13 09	11 14 12	02 02 02	0 0 0	1009.5 1011.5 1008.8	7 2 7	1.0 1.7	81.2 82.6	76.0 76.6 76.5	82.2 82.2	9	X X 2 1 2 4		X 0	X 11 6 10 0 10	3 3 3

 $\frac{1}{2}$ All columns in USWB 1210-F are not included here. Those deleted are:

Column 2 Day of week Column 23 Course of ship
3 Octant " 24 Speed of ship
13 Barometer as read " 31 Diff. sea-air, °F.
14 Barometer as corrected " 32 Dew point, °F.

14 Barometer as corrected 11 17 Air temperature, °F.

Table 7. -- Weather observations (USWB 1210-F), Hugh M. Smith cruise 43 (cont'd)

							337	ea-	1											1		
					ν	/ind	l .	her	Pr	essu	re	Те	mpera	ature		С	loi	ıds			W	aves
			Ŀ						.	Characteristic	ge	O 면	된	0 [24	ınt	2			le			
1958	0	de	GCJ	ty	u c	ķt.			orr.	teri	change		-	er,	amount	lov	3	NoI	middle	high	no	
	tude	gitu		bili	cti		Bent		mb	raci		bulb,	bulb,	wate		unt	e low	t ,	E .		ction	riod
Date,	Latitude	Longitude	Time,	Visibility	Direction	peed,	Pre	Past	Bar	Chai	Amt	Dry	Wet	Sea	Total	Amount low	Type	Height low	Type	Type	Dire	Period Height
1/14	04.5°S	142.8°W	0600	98	09	11	02	0	1010.5	2		1	76.5	L	2	X	X					3 3
1/14	05.4°S	142.3°W	1200	98	11	08	00	0	1009.5	7		81.5	76.2		9		X					3 3
1/14	06.1°S	141.9°W	1800	98	07	11	02	1	1012.2	1			77.4		2	2	1			0		3 2
1/15	06.9°S 07.8°S	141.4°W 141.0°W	0000	98 98	07 07	11 11	02	0	1008.8	7	2.4	82.8	76.8 76.8	83.4	2	2 X	4 X	4 X	0 X		11	3 2 3 2
1/15	08.6°S	140.5°W	1200	98	07	11	00	0	1009.5	7		82.0		82.8	9	X		X				хх
1/18	08.9°S	140.5°W	1800	98	05	18	02	2	1008.8	2		85.0		84.0	6	5	2	4	0		06	3 3
1/19	08.1°S 07.7°S	140.8°W 140.4°W	0000 1800	98 98	06 06	16 20	01 25	2	1004.7	7	2.7	86.0		83.8	5 3	4	2	4	0		06	3 3 3
1/20	07.9°S	139.8°W	0000	-	05	14	03	1	1005.4	7			76.5		5	4	1	5	0		07	3 4
1/20	08.2°S	139.5°W	1800	98	04	16	01	2	1008.8	1	2.4	82.2	75.8	82.8	7	5	1	4	0	8	07	3 4
1/21	08.9°S	139.2°W	0000	98	06	10	01	2	1006.1	7	1.7	85.5	76.3	83.8	4	3	I	4	0	8	07	3 3
1/21	09.3°S	139.1°W 138.9°W	1800	98	06 09	16 11	03 15	1 2	1010.8	1 7		83.6	78.2		6	7	2	4	3		09	3 4
1/22	09.9°S	130.9 W	1800	98	06	11	01	1	1012.2	1	1.7	82.8	75.2		4	3	8	4	0		08	3 3
1/23	10.3°S	138.4°W	0000		03	14	03	1	1010.5	7			74.2		7	6	4	4	0		08	3 3
1/23 1/24	10.3°S 09.5°S	138.9°W 139.8°W	1800	99 98	02	13 08	02	2	1014.2	7		83.8	76.8 78.3		5 7	2	8	4	7		08	3 2 3 2
•	09.5°S	139.8°W	0600		06	08	02	2	1011.9	2		83.6		83.5	X			X				3 2
•	09.6°S	139.9°W	1200	98	07	10	02	2	1012.2	7	2.0	84.0	77.8	84.5	X	X	X	Х	X	X	08	3 2
1/24	09.6°S	139.9°W	1800	98	04	11	15	2	1013.5	1	1.0	84.2	77.7	83.3	7	4	8	4	0	8	08	3 2
1/25	09.5°S	139.8°W	0000	98	07	08	02	1	1009.8	7		86.8	78.5		3	2	4	4	6		49	X 0
1/27	08.9°S	139.9°W 139.8°W	1800	98 99	01	06 09	60 15	6	1012.9	0 7	2.4	79.0	74.8		7	7	4 8	4	6		02	2 2 3 3
1/28	09.2°S	139.3°W	0600	97	09	14	00	2	1011.5	2		84.0		83.8	9	X				Х		3 3
1/28	09.2°S	138.8°W	1200	97	09	15	00	2	1009.5	7	1.7	82.8	76.2		9	X	X		X		09	3 3 3
1/28 1/29	09.2°S 09.3°S	138.1°W 137.4°W	1800	97 97	06 08	17 10	02 15	2	1012.2	2 7	1.7	83.4	77.0 76.7		7	4	4	4	6 5		08	3 3
1/29	09.2°S	136.9°W	0600	97	08	14	00	2	1010.8	2		82.5	77.3		9	X	X	X	Х	X	08	3 3
1/29	09.2°S	136.3°W	1200	97	08	10	00	2	1009.8	7	1.7	81.0	76.5	82.7	9	X	X	Х	Х	Х	08	3 3
1/29	09.0°S	136.5°W	1800	97	01	11	02	2	1011.2	2	1.7		77.3		7	5	4	4	6		08	3 2
1/29	09.2°S	137.0°W		94	10	36	61	1	1011.5	7 7	0.7	75.8 77.6	75.6 74.7		8	8	7	3	X		09	X 4 X 5
1/30 1/30	09.2°S	137.1°W 137.2°W	0000	-	11 10	27 31	61 21	6	1010.8	6		80.0	73.5		8	8	7	3		X		2 5
-		137.3°W		-		26	01	2	1010.5	5	0.3	80.7	75.0	82.3	8	4	7	3	7	Х	80	2 6
-		137.4°W					01	2	1011.2	3	1.4	81.0	75.3	82.2								2 7 2 7
		137.5°W 138.1°W					02		1010.5					83.0								2 5
	09.2°S	139.6°W					15		1011.2						7	2	7	3	2	0	10	2 4
1/31	09.6°S	139.7°W	0600	97	06	16	00	1	1012.2													4 4
-		139.6°W					00	1	1010.2	7	1.7	81.6	76.2	83.5								4 4 4
1/31 2/1	10.9°S 11.6°S	139.7°W 139.7°W					01	2	1012.5				78.5 77.7	83.5								2 5
2/1	12.0°S	139.6°W					01		1010.8	2	1.4	83.5	77.3	84.0	2	2	1	4	0	0	07	2 5
2/1	12.5°S	139.6°W	1200				00		1010.2	7	1.0	82.5	76.4	83.6								2 3 2 3
2/1 2/2	12.7°S 11.9°S	139.7°W 139.6°W					01	1	1011.5	6	2.0	88.1	* 78.5	84.0								2 3
2/2		139.7°W	0600	97	06	10	03	1	1010.8	7	2.0	85.0	77.2	83.9	2	2	1	4	0	0	06	2 3
2/2	10.7°S	139.6°W	1200	97	07	12	02	0	1010.2	7	1.4	83.2	77.0	84.0	2	2	1	4	0	0	07	2 3

*Questionable

Table 7. -- Weather observations (USWB 1210-F), Hugh M. Smith cruise 43 (cont'd)

																				_		
					W	ind	1	ea- ner	Pr	essut	re	Te	mpera	ture		C	lou	ıds			Wa	ves
Date, 1958	Latitude	Longitude	Time, GCT	Vieibility	Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	C 1	Type middle	Lype mgn	Deriod	Height
2/2 2/3 2/5 2/6 2/6 2/6 2/6 2/7 2/7 2/7	10.0°S 09.2°S 09.2°S 09.2°S 09.1°S 09.1°S 09.1°S 09.1°S 09.2°S	139.6°W 139.7°W 140.0°W 140.8°W 141.1°W 141.5°W 142.2°W 142.9°W 143.0°W 142.4°W	0000 0600 1200 1800 0000 0600	98 99 99 99 98 98 98 98	05 07 10 09 09 11 09 10	12 13 18 21 20 18 17 16 16	03 02 00 02 02 02 03 01 00	0 1 0 0 0 0 0 0	1012.2 1009.5 1011.9 1008.8 1009.8 1009.5 1011.5 1008.5 1009.8	2 7 1 7 1 3 1 7 2 6	2.2 1.7 2.7 1.4 0.5 1.0 2.4 1.7	85.4 85.0	76.9 78.5 77.2 77.3	84.3 83.0 84.1 83.9 83.9 84.0 84.8	3 4 3 2 X 3 4 2 X X		2 1 1 X	4 4 4 X	2 0 0 X 0 0 0	X 1 1 1	7 2 9 2 9 2 0 2 0 2 0 2 0 2	2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3
2/7 2/8 2/8 2/8 2/9 2/10 2/10 2/10 2/10	09.2°S 09.2°S 09.2°S 09.3°S 08.8°S 08.0°S 07.6°S 06.9°S 06.2°S	141.7°W 141.3°W 140.7°W 140.1°W 139.7°W 139.7°W 139.7°W 139.6°W 139.7°W	0600 1200 1800 0000	98 98 98 98 99 99 98 98	10 08 09 11 08 08 07 07 09	21 18 16 17 17 17 20 13 18	02 03 00 00 02 02 02 01 02	0 0 0 0 0 0 0 1 0	1009.8 1006.1 1008.1 1008.5 1009.8 1006.1 1008.8 1008.5 1010.8	1	2.4 1.7 1.0 0.7 2.0 1.7 0.7	83.4 83.7 86.5 83.7 82.6 84.4	78.8 77.7 77.5 77.4 78.0 77.9 77.6	83.2 84.0 83.3 83.1 82.8	3 4 X 3 2 4 X 2 2 2	3 4 X 2 2 4 X 2 2 2	1 1 1	X 4 4 X 4 4	0 X 0 0 0 X 0 0	X 0 9 0 0 0 0 0 X 0 0 0	9 19 18 18 18 16	2 4 2 4 2 5 2 4 3 3 3 3 3 3 3 3 3 3 3 3
2/11 2/11 2/12 2/12 2/12 2/16 2/16 2/16	05.6°S 06.3°S 07.1°S 07.9°S 08.5°S 09.1°S 08.9°S 08.3°S 07.6°S 06.8°S	139.8°W 139.6°W 139.6°W 139.6°W 139.7°W 139.8°W 140.1°W 140.6°W 141.1°W 141.6°W	0600 1200 1800 0000 0600 1200 0600 1200 1800	98 98 98 98	11 11 08 11 11 07 06 07 07	13 10 14 14 13 17 14 15 17	80 03 01 03 00 01 00 01 02 01	0 1 1 8 1 0 1 0 0	1009.8 1009.1 1011.5 1008.8 1011.2 1009.8 1007.1 1007.8 1007.5	6 1 7 2 6 6 1 6	1.4 1.7 2.0 2.0 1.7 2.0 1.4 1.5	82.3 84.5 83.5 83.0 83.3 87.8	78.3 78.8 78.3 76.5 78.0 78.6 77.8	82.9 83.2 83.7 83.5 83.3 84.5	X 7 1 6 X 1 4 1 X 2	1 4 X X	1 7 X 1 8 X	X 4 4 X 4 5 X	5 0 X 0 0 X X X	X 0	19 : 19 : 19 : 19 : 19 : 16 : 17	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
2/18 2/18 2/18 2/18 2/19	04.5°S 03.7°S 02.9°S 02.1°S 01.2°S 00.4°S 00.5°N	142.0°W 142.4°W 142.8°W 143.4°W 143.8°W 144.1°W 144.6°W 145.1°W 145.5°W 146.0°W	0000 0600 1200 1800 0000	98 98 97 97 98 97	13 11 11 10 12 10	15 15 13 12 15	03 01 00 03 15	1 1 X 1 8	1007.1 1008.5 1008.1 1010.5	2 6 2 7 2 6 2 7	0.9 1.4 2.4 2.0 1.5 2.7 2.5	83.6 83.0 82.2 83.0 83.3	77.0 77.2 77.8 77.3 78.1 77.7 78.4	83.1 82.8 82.8 82.8 82.3 82.3 81.7 82.0	3 1 6 1 X 6 7	1 X X 6 1	X 1 8 X X 4 8	X 4 5 X X 4 4	X 0 7 X X 0 7	X 0 X 0 1 1 0 0 X 0 X 0 0 1 0 1)8)9 13)8)8)8	3 3 3 3 3 3 3 3 3 3
2/19 2/20 2/20 2/20 2/20 2/21 2/21 2/21	03.0°N 03.8°N 04.7°N 05.4°N 06.2°N 07.1°N 07.8°N 08.6°N	146.3°W 146.7°W 147.0°W 147.4°W 147.6°W 148.0°W 148.3°W 148.6°W 149.1°W	1800 0000 0600 1200 1800 0000 0600 1200	98 98 96 97 97 97 96	11 10 10 07 07 07 08 09	17 14 09 19 16 18 20 16	03 02 80 01 03 03 00	0 0 8 1 0 1 2	1008.1 1009.8 1009.1 1011.2 1010.2 1012.2	2 1 7 8 1 6 2 1 6 2 2 6	2.0 2.4 1.4 2.2 1.4 2.0 0.7	84.8 86.2 80.6 82.5 83.6 82.5 82.8	79.0 79.8 76.8 78.5 78.4 77.8 76.5 75.6	82.9 83.8 82.7 82.8 82.7 83.2 82.1 81.6	3 2 X 2 3 7 9	2 1 X 2 7 X X	4 2 X 2 7 X X	4 4 X 5 4 X	6 X X 0 0 X X	0 1 X 1 X 0 5 0 0 X 0 X 0 X 0	11 10 10 08 07 07 08	3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4

Table 7. -- Weather observations (USWB 1210-F), Hugh M. Smith cruise 43 (cont'd)

					W	lind		ea- her	Pr	essu	re	Te	mpera	iture		С	lou	ıds			w	ave	9 9
Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Direction	Speed, kt.	Present	Past	Bar, corr., mb.	Characteristic	Amt, change	Dry bulb, °F.	Wet bulb, oF.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	e.	Height
2/22	10.3°N	150.2°W	0000	98	09	14	01	0	1012.5	7	1.9	84.0	76.5	81.8	1	1	8	4	0	0	08	3	4
2/22	11.1°N	150.7°W	0600	97	10	17	00	0	1013.9	2	2.0	82.2	76.2	80.0	9	X	X	X	X	X	08	3	4
2./22	11.9°N	151.0°W	1200	97	06	12	00	X	1014.6	7	0.7	79.0	74.7	78.3	9	X	X	X	X	X	06	3	4
2/22	12.8°N	151.4°W	1800	98	10	11	01	1	1016.3	2	2.0	80.4	74.7	78.0	3	2	1	4	0	1	07	3	2
2/23	13.7°N	151.9°W	0000	98	08	07	02	0	1014.2	7		80.2	74.2	79.0	2	2	1	4	0	0	08	3	2
2/23	14.5°N	152.5°W	0600	97	08	05	02	0	1015.2	2	1.4	80.8	74.7	79.4	2	Х	X	X	X	Х	09	3	2
2/23	15.2°N	153.0°W	1200	97	02	04	00	0	1015.2	7	0.7	78.8	73.5	78.4	9	X	X	X	X	X	49	X	X
2/23	16.0°N	153.6°W	1800	98	23	06	01	1	1016.9	2	1.9	77.2	73.3	77.9	2	1	2	5	3	0	29	2	2
2/24	16.7°N	154.2°W	0000	98	24	12	01	5	1015.6	7	1.4	78.0	72.5	77.5	3	2	2	4	0	1	29	3	2
2/24	17.4°N	154.8°W	0600	97	26	11	02	0	1015.9	2	1.4	77.0	72.0	77.1	1	Х	X	X	Х	Х	27	3	Z
2/24	18.0°N	155.4°W	1200	97	31	11	00	x	1015.2	7	1.0	76.0	70.5	76.0	9	Х	Х	X	X	X	49	Х	Х
2/24	18.8°N	156.0°W	1800	99	34	10	02	2	1016.9	2	1.7	75.2	71.3		7	4	2	5	6	0	30	2	2
2/25	19.4°N	156.5°W	0000	99	02	14	01	1	1015.9	7		76.0	71.0	77.0	4	3	4	4	6	0	02	2	3
2/25	20.0°N	157. I°W	0600	97	05	19	02	1	1018.0	1		74.0	69.4		3	X					04	3	4
2/25	20.7°N	157.6°W	1200	97	36	12	01	X	1019.3	6	0.3	72.1	66.0	75.2	9	X	X	X	X	X	01	3	3

Table 8.--Weather observations (USWB 1210-F), Charles H. Gilbert cruise $38\frac{1}{}$

					v	Vind	ł	ea-	Pr	essu	re	Te	mper	ature		C	lot	ıds			W	av	es
Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Direction	Speed, kt.	Present	Past	Bar, corr., mb.	Characteristic	Amt, change	Dry bulb, °F.	Wet bulb, °F.	Sea water, F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
2/8 2/9 2/9 2/9 2/10 2/10 2/10 2/11	21.8°N 21.6°N 21.4°N 20.7°N 19.9°N 19.2°N 18.5°N 18.8°N 17.2°N	158.0°W 158.7°W 158.6°W 157.5°W 157.3°W 156.8°W 156.4°W 156.0°W 155.7°W	1800 0000 0600 1800 0000 0600 1200 1800 0000	99 99 99 99 99 98 99 99	16 28 15 14 12 13 09 10 08	09 09 09 08 02 03 08 09 14	03 02 02 02 02 02 02 02 02	1 0 0 0	1015.2 1015.2 1015.2 1015.9 1014.2 1016.6 1015.9 1016.9 1013.9	2 8 4 8 3 0 2 7 2	0.0 0.0 1.4 1.7 0.3 0.7 2.9	76.1 74.3 75.7 78.3 75.5 76.0 76.1 76.9	68.3 70.3 72.1 71.5 72.2 72.5 72.9 73.2 73.2 72.2	74.8	6 4 X 1 1 X 1 1 6 X	5 2 X 1 1 X 1 1 5	4 X 1 X 1 2 2	5 X 5 5 5		X : 0 0 X 0 0 0	17 XX 13 13 13 14 11	5	3 2 2 2 1 2 2 2 2 4
2/11 2/11 2/12 2/12 2/12 2/12 2/13 2/13	16.5°N 15.8°N 15.2°N 14.6°N 13.2°N 13.2°N 11.8°N 11.2°N 10.5°N 09.8°N	155.3°W 155.0°W 154.7°W 154.4°W 154.1°W 153.8°W 153.4°W 152.9°W 152.6°W 152.2°W	1200 1800 0000 0600 1200 1800 0000 0600 1200 1800	99 99 99 99 99 99 99 99	07 08 08 08 08 06 08 07 07 08 05	16 17 19 19 21 17 18 21 16 17	00 01 03 02 00 03 01 02 02 14	X 1 1 2 X	1014.6 1015.2 1012.5 1013.9 1012.2 1013.5 1010.5 1011.5 1010.2	8 2 7 2 7 2 7 2 7 2	1.4 1.4 3.4 1.5 2.0 1.9 3.4 2.0 2.0	76.6 78.4 77.3	72.2 72.5 73.0 71.1 71.6 72.9 72.7 74.6 75.5 76.3	,	X I 5 X 7 2 1 X 8	X 1 5 X 6 2 X 7	X 1 1 X X 4 1	X 5 5 X 5 5 X	X 0 0 X X 3 0 X X 2	X 0 0 X X 0 0	10 12 09 09 09 09 10 10	4 4 4 4 4 3 3 3 3 3	4 4 4 5 5 5 5 5 5 5 5 5 5
2/14 2/14 2/14 2/15 2/15 2/15 2/15 2/16 2/16	09.0°N 08.3°N 07.6°N 07.0°N 06.3°N 05.5°N 05.0°N 04.7°N 04.5°N	151.9°W 151.5°W 151.2°W 150.5°W 150.1°W 150.1°W 150.0°W 150.0°W 150.0°W	0000 0600 1200 1800 0000 0600 1200 1800 0600 1800	98 98 98 98 99 99 99	07 09 08 12 10 10 09 09 08 11	18 10 13 22 10 07 08 12 08 10	21 00 00 62 01 00 00 00 00	6 6 X X 6 2 X X 0 X	1009.5 1010.8 1008.8 1010.8 1007.8 1008.5 1007.5 1009.1 1007.5	7 2 7 2 7 2 7 3 2 2	1.4 2.0 2.2 2.7 1.4 1.7 1.4	80.5 79.8 80.8 77.5 82.0 82.0 81.0 82.8 82.3 82.2	77.8 77.5 78.2 76.9 78.2 78.6 79.0 78.5 78.1	82.8 82.4 82.3 82.6	8 X 8 6 X X 5 1	3 X 8 4 X X 3 X	7 X 0 2 X 8 X 8	X X 4 X X 4	X 7 6 X	X 0 X 0 X	10 10 10 09 09 09	3 3 3 3 3 3 3 3 3	5 5 5 4 4 4 4 3 3
2/17 2/17 2/18 2/18 2/19 2/19 2/20 2/20 2/21 2/21	03.5°N 02.9°N 02.5°N 01.9°N 01.5°N 00.9°N 00.6°N 00.1°N 00.2°S 00.8°S	150.0°W 150.2°W 150.1°W 150.3°W 150.2°W 150.2°W 150.1°W 150.0°W 150.2°W	0600 1800 0600 1800 0600 1800 0600 1800	99 99 99 99 99 99 99	11 16 12 11 13 12 10 12 12 11	13 16 12 10 05 18 10 12 14 13	00 01 00 03 00 01 00 15 00	X X X X X 1 X 8 X 8	1006.8 1008.8 1008.1 1010.2 1009.5 1011.2 1009.8 1011.2 1010.2	2 2 2 2 2 2 2 2 2 2 2 3	2.0 1.5 1.4 2.0 1.4 1.4 2.0	82.5 81.8 82.4 82.9 82.5 83.8 82.2 82.1 82.2 82.2		82.3 82.9 82.5 83.2 * 82.4 82.2 82.1	X 2 X 2 X 4 X 6 X 3	X 2 X 2 X 3 X 5 X 3	X 1 X 8 X 2 X 3 X 2	4 X 4 X 4 X 4 X	1 X 6	0 X 0 X X X X	16 12 11 11 11 11 12	3 3 3 3 3 3 3 3 3	3 3 3 5 4 3 4

1/ All columns in USWB 1210-F are not included here. Those deleted are:

Column		Day of week Octant	Column		Course of ship Speed of ship
11	13	Barometer as read	11	31	Diff. sea-air, °F.
11	14	Barometer as corrected	11	32	Dew point, °F.
11	17	Air temperature, °F.			

^{*}Questionable

Table 8. --Weather observations (USWB 1210-F), Charles H. Gilbert cruise 38 (cont'd)

					٧	Vind	1	ea- her	Pr	essu	re	T	emper	ature		C	lou	ıds			W	ave	es
Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt, change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low		Type middle	Type high	Direction	Period	Height
2/24	01.1°S 01.6°S 02.2°S 02.7°S 03.1°S 03.5°S 03.9°S 04.4°S 05.0°S	149.8°W 149.3°W 148.8°W 148.3°W 147.7°W 147.0°W 145.7°W 145.0°W 144.4°W	0600 1200 1800 0000 0600 1200 1800 0000 0600 1200	99 99 99 99 99 99	05 07 06 06 05 05 04 04	16 16 14 10 13 12 06 09	00 00 01 02 00 00 03 15 00	X 8 0 1 X 8 8	1010.8 1010.5 1013.9 1010.2 1012.2 1011.2 1013.5 1010.2 1012.2 1010.5	2 8 1 7 2 7 2 7 2 7	1.4 2.0 2.2 1.5 1.4 1.4 2.2	81.8 81.2 82.5 81.9 81.8 79.2 82.0 83.0 82.4 81.5	78.2 78.5 78.0	82.2 82.1 82.2 82.8 82.6 82.5 82.5 83.5 83.6 83.2	X 1 2 X X 6 6	X 1 2 X X 6 6	X 2 4 X X 2 9	5 5 X X 4	X 0 0 X X 0 0	X (0 0 0 X (0 0 0 X (0 X (0 0 X (0 X	09 09 09 09 09 09	3 3 3 3 3 3	3 3 3 3 3 3 2 2 2
2/24 2/25 2/25 2/25 2/25 2/26 2/28 2/28 3/1 3/2	06.1°S 06.7°S 07.2°S 07.2°S 08.2°S 08.2°S 08.4°S 07.7°S 07.8°S 08.9°S	143.6°W 142.9°W 142.2°W 141.5°W 140.8°W 140.3°W 140.7°W 140.5°W 139.8°W 139.4°W	1800 0000 0600 1200 1800 0000 1800 0000 0000	99		12 11 07 06 06 07 13	02 03 00 00 01 02 01 02 03	1 1 X 1 0	1011.9 1009.1 1011.9 1011.2 1012.5 1010.2 1007.5 1009.1 1007.1	2 7 2 7 1 7 7 3 6 7	2.2 2.2 1.0 1.4 1.2 2.0 2.0	82.7 82.4 82.6 82.2 83.9 83.5 87.1 83.2 84.9 85.6	78.5 78.4 77.9 77.1 76.4 77.3 78.6 77.6 78.4 79.8	83.3 84.4 84.0 84.1 83.9 84.7 86.3 84.5 84.8	2 4 X 3 3 3 7 7	2 4 X 3 2 3 2 3		5 X X 4 5 4 5	0 X 0 3 0 0 3	0 X X 0 0 0 0 0 0	08 06 06 06 06 35 36 03	3 3 3 3 3 3	2 2 2 2 2 2 2 2 3 2 2
3/3 3/4 3/4 3/5 3/6 3/6 3/7 3/7 3/7	09.6°S 10.4°S 10.2°S 09.8°S 09.5°S 09.6°S 09.6°S 09.6°S 09.3°S 10.2°S	138.8°W 138.8°W 138.9°W 139.3°W 140.0°W 139.8°W 139.8°W 139.8°W 141.6°W	0000 0000 1800 1800 0000 1800 0600 1200 1800	99 99 98 99 99 99	06 06 07 04 04 08 07 11 07	12 14 17 07 17 19 08 09	01 03 01 25 01 03 01 02 03	1 X 8 I 8 0 0 8	1008.1 1008.8 1010.8 1012.9 1008.5 1011.5 1008.5 1008.1 1010.8	6 6 2 2 7 3 3 5 2	1.9 1.7 2.7 2.7 1.5 1.4 0.9 2.4	83.3 82.9 83.1 80.5 85.3 83.8 83.0 83.6 81.9	77.7 78.1 77.6 77.1 77.9 77.0 77.7 76.5 75.3 78.6	84.4 84.1 84.2 84.0 84.6 84.0 83.9 84.0 84.3	3 6 2 7 2 3 3 1 6 3	2 4 2 7 2 3 3 1 4 3	1 2 3 2 4 4 1 4 2	4 4 3 4 4 4 5 4	3 0 0 0 0 0 0 0	0 0 0 0 0 0 0	03 06 03 06 07 08 08 05	3 3 3 3 3 3	2 3 3 3 3 3 3 3 3
3/11 3/11 3/12 3/12 3/12 3/12 3/13	10.7°S 11.2°S 11.8°S 12.3°S 12.9°S 13.5°S 14.1°S 14.6°S 14.9°S	142.3°W 142.8°W 143.4°W 144.0°W 144.5°W 145.2°W 145.8°W 146.4°W 147.2°W		99 99 99 99	10 10 10 13	14 12 10 07 10 14 10	02 00 00 03 02 00 03 01 03	0 X 8 2 1 X I	1008.1 1010.5 1009.8 1012.2 1008.8 1009.5 1009.5 1011.5 1008.5	6 2 7	2.4 1.4 1.7 2.5 1.4 1.0 1.4 2.2	83.3 82.8 84.3 84.7	77.6 78.8	84.8 84.5 84.5 85.0	5 X 4 2 6	X 4 2 2	X 2 2 X 2 4 2	4 4 X 4 5	X 0 0 X 0 0	X 0 0 X 0 0 X	10 13 13 13 10 11	3	3 3 2 2
3/15 3/15 3/20 3/20 3/20 3/20 3/21 3/21	15.6°S 16.3°S 17.1°S 17.2°S 16.7°S 16.2°S 15.7°S 15.3°S 14.8°S 14.2°S	148.3°W 148.7°W 149.2°W 149.2°W 148.7°W 148.1°W 147.6°W 147.0°W 146.4°W 145.8°W	0000 0600 1200 1800 0000 0600	99 99 99 99 99 99	10 08 12 12 10 11 09	13 17 12 15 14 12 18 14	25 00 00 03 00 00 03 02 00 00	2 X X 1 X X 0 0	1010.2 1012.5 1012.5 1012.2 1012.9 1011.5 1013.5 1010.5 1012.5	2 7 8 2 7 2 7 2	2.0 0.5 2.0 1.0 1.5 2.0	84.1 83.5 84.9 84.5 83.8 86.5 84.4	77.8 77.9 77.0 78.3 77.3 78.6	84.0 84.1 83.9 84.1 84.0 84.7 84.5	X X 2 X X 2 2 X	X X 2 X X 2 2	X X 2 X X 2 I X	X 5 X 5 4 X	X 0 X 0 0 X	X 0 X X 0 0 0	08 08 09 09 09 09	3 3 3 3 3 3 3 3	2 2 2 2 2 2 2 2

Table 8. -- Weather observations (USWB 1210-F), Charles H. Gilbert cruise 38 (cont'd)

					Γ,	17.2	w	ea-	7-									_		\top		
						Wind	t	her	Pr	essu	1	1.0	mper				lou	aas	-	-	Wan	/es
Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, oF.	Wet bulb, oF.	Sea water, oF.	Total amount	Amount low	Type low	Height low	Type middle	Lype mgn Direction	Period	Height
3/22 3/22 3/22 3/23 3/23 3/23 3/23	13.7°S 13.1°S 12.6°S 12.0°S 11.5°S 11.0°S 10.5°S 10.1°S 09.7°S 09.3°S	145.3°W 144.8°W 144.3°W 143.8°W 143.3°W 142.7°W 142.1°W 141.6°W 141.1°W 140.6°W	1800 0000 0600 1200 1800 0000 0600 1200 1800 0000	99 99 99 99 99 99 99	10 10 12 10 09 09 12 11 11	14 12 14 20 15 16 14 20 17	03 02 00 00 03 02 00 00 03 02	X 1 1 X X 0 0 0 X X	1013.9 1011.2 1012.9 1010.8 1012.5 1009.5 1011.5 1009.5 1011.2	2 7 2 7 2 7 2 7 2 7	2.0 2.2 2.0 2.0 2.0 2.0 1.9	85.7 84.8	78.0 78.5 79.1 77.2 78.9 78.8 77.8 77.5 78.2 78.2	84.4 84.1 85.0 84.4 84.2	4 4 X X 3 3 X X 2 2	X 2 3 X	X 2 2 X	4 X X 4 4 X	0 X X I 0 X X	0 00 0 00 X 00 0 00 X 00 X 00 X 00 0 00	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3 3 4 4 4 5 4
3/27 3/27 3/27 3/27 3/28 3/28 3/28 3/28	09.2°S 09.2°S 09.2°S 09.2°S 09.2°S 09.2°S 09.2°S 09.1°S 09.1°S	139.4°W 138.8°W 138.2°W 137.5°W 137.0°W 136.3°W 136.2°W 136.9°W 137.5°W 138.2°W	1800 0000 0600 1200 1800 0000 0600 1200 1800 0000	99 98 98 99	12 14 08 09 11 08 08 07 05 10	14 19 09 10 08 09 11 12 14	03 03 00 00 01 03 50 00 02	5 2	1012.2 1008.5 1011.5 1009.5 1012.5 1009.1 1011.9 1009.5 1011.5	0 6 2 8 1 7 2 7 1	1.4 1.0 1.0 1.2 1.4 1.7	84.2 82.7 86.3 84.9 80.8 82.8 85.7	79.8 78.0 76.0 75.6 78.1 77.9 76.8 77.7 80.5 79.9	83.8 83.8 83.8 84.1 83.8 83.7 84.0	3 5 X X 3 4 X X 2 2	3 4	X 2 4 X X 1	X X 4 4 X	6 X 0 0 X X 0	0 10 0 10 X 10 0 00 0 00 X 00 X 00 0 00	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3
3/29 3/29 3/30 3/30 3/31 3/31 3/31	09.1°S 09.1°S 08.7°S 07.5°S 06.9°S 06.4°S 05.7°S 05.7°S 06.3°S 07.0°S	138.9°W 139.4°W 139.7°W 139.8°W 139.7°W 139.6°W 139.6°W 139.6°W 139.7°W	1200	98 98 99 99 98 99 98 98 98	10 09 09 10 10 09 08 11 09 08	14 14 12 09 10 14 13 12 11	00 00 02 00 00 03 01 00 00	0 6 8	1011.2 1009.5 1010.2 1010.2 1009.1 1011.2 1008.5 1011.2 1010.2	2 7 1 2 7 2 7 2 7 2	1.4 0.2 2.4 1.4 2.0 1.4 2.0	85.0 85.7 84.1 83.5	77.5 78.9 80.2 79.2 78.9 79.2 79.0 78.6 78.6	84.2 84.2 85.2 83.9	X 1	X 1 X X 4 5	X 1 X X 1 2 X	X 4 X 4 4 X X	X 0 X 0 0 X X	X 00 00 00 00 00 00 00 00 00 00 00 00 00	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3
4/4 4/4 4/4	09.2°S 09.2°S 09.1°S 09.1°S	139.6°W 139.7°W 140.0°W 140.0°W 140.7°W 141.2°W 141.9°W 142.5°W 143.2°W	0000 0600 1200 1800 0000	99 99 98 98 99	07 14 34 04 35	11 06 06 06 06	02 02 02 02 03	0 0 0 1 0		7 2 8 2 7	1.9 1.4 1.4 2.5 2.0 1.2 1.9 2.4	83.1 87.2 84.1 83.5 83.3 85.4	78.1 77.8 78.0 78.0 75.4 75.7 77.0	84.2 85.1 84.6 84.8 84.7	1 1 5	1 1 2 1 1 3	1 1 1 1 1 1	4 4 4 4 4	X 0 0 0 0 0 0	0 08	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3 3 3 3 2 2 2 2
4/5 4/6 4/6 4/6 4/7 4/7 4/7 4/7	09.1°S 09.1°S 09.1°S 09.2°S 09.6°S 10.3°S 10.9°S 11.5°S	142.5°W 141.8°W 141.1°W 140.5°W 140.0°W 139.7°W 139.7°W 139.7°W 139.8°W	0000 0600 1200 1800 0000 0600 1200	99 99 98 98 99 99	07 06 15 02 03 36 35 02	08 06 05 11 15 14 07 05	02 02 02 02 02 02 02 00	1 0 0 0 0 0 0 X X	1006.8 1008.8 1008.5 1009.8 1006.8 1009.5 1008.5	2 7 2 6 2 7 2 6	1.5 2.7 1.5 0.7 0.7 1.7 2.0	84.4 85.5 83.5 82.4 86.2 83.4 84.3 80.5	76.3 77.3 75.1 75.9 77.9 77.2 77.3 76.2	84.7 86.0 85.6 84.5 84.5 84.8 85.0 84.2	3 3 2 2 1 2 X 3	3 2 2 1 1 X X	2 2 2 2 1 X X	4 4 4 4 X X	0 0 0 0 0 0 X X	0 00 0 00 0 00 X 0! X 0!	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 2 1 2 3 3 3 3 3

Table 8. --Weather observations (USWB 1210-F), Charles H. Gilbert cruise 38 (cont'd)

	1				-																		
					v	Vind	1	ea- her	Pr	essu	re	Te	emper	ature		С	lou	ıds			W	av	e s
Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, OF.	Wet bulb, °F.	Sea water, OF.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
4/12	12.7°S 12.5°S 12.0°S 11.4°S 11.7°S 10.0°S 09.4°S 08.8°S 08.3°S 07.7°S	139.8°W 139.7°W 139.7°W 139.7°W 139.7°W 139.7°W 140.5°W 140.5°W 140.5°W	1800 0000 0600 1200 1800 0000	98 99 99 98 99 99	07 07 08 07	05 05 11 08 08 04 09 08 09	01 00 00 01 02 00 01 02 03 80	0 X X 0 X 1 0	1008.5 1010.5 1009.8 1011.9 1008.5 1010.5 1009.8 1011.5 1008.5	7 2 7 2 7 2 8 2 6 2	2.0 0.9 1.4 2.0 1.9 0.7 1.0 2.0	82.9 83.8 86.2	76.8 77.5 75.6 77.3 78.2	85.1 84.4 84.8 85.2	X 2 2	X 1 2	X X 2 2	X 4 4	X 0 0	X 8 0 X 0 0 0	15 15 15	3 3 3 3 3 3 3	3 3 3 2 2 2 2 2 2
4/13 4/14 4/14 4/15 4/16 4/16 4/17 4/18	08.1°S 08.4°S 08.8°S 09.3°S 09.9°S 10.3°S 10.3°S 09.8°S 09.6°S	139.7°W 139.6°W 139.5°W 139.2°W 139.0°W 138.7°W 138.9°W 139.4°W 139.8°W	1800 1800 0000 1800	99 99 99 99 99 98 98	11 08 09 05 10 10 06 10 08	14 15 13 10 15 15 15 11 09	00 01 02 03 02 02 14 14 02	X 0 X X 2 6 X	1010.8 1013.5 1009.1 1013.5 1013.2 1009.1 1012.5 1013.5 1010.5	1 2 7 2 2 7 2 2 7 2	1.5 2.4 1.7 1.7 2.4 2.4 1.7 2.0	83.5 84.8 84.2 83.6 84.2 83.8 86.4	78.2 77.4 76.7 77.2 76.7 75.9 78.0 78.6 79.0 77.1	84.4 84.6 84.4 83.9 84.1 84.0 84.0	X 2 1 4 6 6 6 7 3 X	X 2 1 2 6 2 2 2 3 X	2 1 2 4 2 3 3 2	4 4 4 4 4 4	0 0 6 0 6 6 2 0	0 0 0 0 0 X	10 12 10 10 08 06 06	3 3 3 3 3	4 4 3 3 3 3 3 2 2
4/18 4/22 4/22 4/22 4/22 4/23 4/23 4/23	09.5°S 09.6°S 08.7°S 08.0°S 07.4°S 06.8°S 05.4°S 04.7°S 04.0°S	139.9°W 139.8°W 140.4°W 140.8°W 141.2°W 141.6°W 142.0°W 142.4°W 142.8°W 143.2°W	1800 0000 0600 1200 1800 0000 0600 1200	98 99 98 98 99 99 99	07 08 26 08 09 09 11 08 06 05	11 08 03 14 13 15 10 08	00 02 03 00 00 02 02 00 00 03	X X I X X	1011.2 1013.2 1010.8 1012.9 1011.2 1012.9 1008.8 1010.5 1008.8 1011.5	7 2 7 2 7 2 7 1 7 2	1.2 2.4 1.9 1.7 1.7	83.2 88.5 84.4 84.4 84.5 84.3	77.5 78.2 *80.9 79.8 79.3 79.1 81.4 79.5 78.1 79.8	84.4 85.4 84.9 84.7 84.7 84.6 84.2	X 3 3 X	1 3 X X 3	1 2 X X I I X X	4 X X 4 4 X	0 X X 0 0 X X	0 X X 0	08 06 07 07 07 10	3 3 3 3 3 3 3	3 2 2 2 3 3 3 3 3
4/24 4/24 4/25 4/25 4/25 4/25 4/25 4/26	00.4°S 00.4°N 01.0°N 01.8°N 02.5°N	143.7°W 144.2°W 144.6°W 145.1°W 145.5°W 145.9°W 146.3°W 146.8°W 147.3°W	1200 1800 0000 0600 1200 1800 0000	99 99 99 98 99	10 10 13 12 12	07 05 08 14 13	00 00 03 02	2 X 0 0 0 X X 2	1007.1 1008.5 1007.5 1009.1	7 2 7 2 7	2.0 1.7 2.2 2.0 1.7 2.0 1.9	80.8 82.2 83.0 84.0 82.2 81.9 84.4 84.0	78.1 78.1 78.2 80.0 80.3	82.7 83.8 82.5 82.3 82.7 83.8	X X 4 5	X 2 1 X X 3	X 1 1 X X 2 2	X 4 4 X X 4 4	X 0 0 X X 3	X 0 0 X X 0 0	08 08 08 08 08 08	3 3 3 3 3 3	3 3 3 3
4/26 4/27 4/27 4/27 4/27 4/28 4/28 4/28	04.6°N 05.3°N 06.0°N 06.7°N 07.4°N 08.1°N 08.9°N 09.5°N	148.0°W 148.4°W 148.8°W 149.1°W 149.4°W 150.3°W 150.7°W 151.2°W 151.6°W	1800 0000 0600 1200 1800 0000 0600 1200	98 98 98 98 97 97	36 07 08 06 05 06 06 08	06 18 13 13 19 18 17 20	50 14 00 00 60 21 00	6 2 2 6 6 6 6 6 X	1008.1 1010.2 1008.5 1011.2 1008.8 1009.8 1009.1	2 7 2 7 2 7 2 6	1.5 3.1 2.0 1.7 2.0 2.0 1.4 1.2	79.4 81.5 80.2 80.2 79.6 83.1 80.0 79.5	76.6 78.2 77.1 78.6 77.7 78.4 77.0 76.3	81.5 82.5 82.2 82.0 81.5 81.1 81.0	8 X X 8 7 X	1 X X 3 3 X X	1 X X 7 7 X X	4 X X 4 4 X	7 7 X 2 2 X X	0 X X X X 0 X	03 04 03 04 04 04 04	3 3 3 3 3 3 3	3 4 4 4 4 5 5

Table 8. -- Weather observations (USWB 1210-F), Charles H. Gilbert cruise 38 (cont'd)

					V	/ind	1	ea- her	Pr	essu	re	Te	mper	ature		С	lou	ıds			W	ave	e 8
Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Direction	Speed, kt.	Present	Past	Bar, corr., mb.	Characteristic	Amt. change	Dry bulb, OF.	Wet bulb, oF.	Sea water, ^o F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
4/29	11.0°N	152.1°W	0000	99	07	16	02	1	1009.5	7	1.7	81.2	77.0	80.5	5	5	2	4	0	0	05	3	5
4/29	11.7°N	152.5°W	0600	98	06	16	00	2	1011.5	2		79.8	75.6	80.3	X	X	Х	Х	X		05	3	4
4/29	12.4°N	152.9°W	1200	99	07	19	00	6	1010.2	7		78.0	74.6	79.3	X	Х	X	X	Х	X		3	4
4/29	13.1°N	153.3°W	1800	99	08	16	03	X	1012.9	2	2.0	78.9	74.0	79.0	5	3	2	4	6	0	05	3	4
4/30	13.9°N	153.7°W	0000	98	08	14	03	2	1011.5	8	1.9	79.4	73.6	78.2	7	1	1	4	7	0	05	3	4
4/30	14.7°N	154.1°W	0600	98	08	15	00	2	1013.2	2	1.9	77.7	73.1	77.9	X	X	X	X		X		3	3
4/30	15.3°N	154.5°W	1200	98	06	17	00	X	1012.9	7	1.4	76.0	73.1	77.5	X	X	X	X	X	X	05	3	3
4/30	16.1°N	154.9°W	1800	98	06	19	03	X	1014.9	2	2.0	77.1	73.2	77.3	7	7	4	4	0	-	05	_	3
5/1	16.9°N	155.3°W	0000	99	06	15	02	2	1013.9	7	1.7	78.5	72.3	77.0	5	4	4	4	0	_	05	3	4
5/1	17.7°N	155.7°W	0600	98	06	18	00	2	1015.2	2	2.0	75.9	71.7	77.0	X	X	X	X	X	X	05	3	4
												- 4 0									0.5	2	_
5/1	18.3°N	156.0°W	1200	99	07	22	00		1014.2	8	1.7	74.2	70.5	75.5	1	X	X	X				3	
5/1	19.0°N	156.4°W	1800	98	23	04	03	X	1016.3	2	1.7	75.5	70.7	76.8	3	3	4	4	0	0	16	3	3
5/2	19.8°N	156.7°W	0000	99	06	16	01	0	1014.6	7	1.9	77.1	72.2	76.3	2	4	1	4	0	8	04	3	4
5/2	20.7°N	157.2°W	0600	99	80	12	80	1	1015.2	2	1.7	76.4	70.4	76.7	4	4	4	4	0	0	08	3	3

Table 9. --Weather observations (USWB 1210-F), Hugh M. Smith cruise 45-

					٧	Vind		ea- her	Pro	essu	re	Te	mpera	ature		C	loc	ıds	_	T	Wa	aves
Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Direction	Speed, kt.	Present	Past	Bar, corr., mb.	Characteristic	Amt, change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type nign	Direction	Period Height
3/29 3/29 3/29 3/30 3/30 3/30 3/30 3/31 3/31	21.0°N 20.3°N 19.7°N 19.0°N 18.5°N 18.0°N 17.4°N 16.8°N 16.2°N	157.6°W 157.3°W 156.5°W 156.0°W 155.4°W 154.9°W 154.3°W 153.6°W 153.1°W	0600 1200 1800 0000 0600 1200 1800 0000 0600	98 98 98 97 97 97	06 06 06 17 02 06 06 07	25 22 17 12 28 21 20 20 24	01 00 01 15 02 01 01 15	2 1 1 2 1 1 1 6	1019.0 1019.3 1018.0 1015.9 1018.0 1017.6 1018.0 1015.6 1016.6	3 7 3 7 2 3 1 7 3	1.0 1.0 2.0 2.0 1.4 2.0 2.4	72.5 73.0 74.1 78.0 73.8 73.0 74.5 76.0 71.8	66.3 67.2 67.8 68.4 68.0 68.3 69.8 70.8	74.3 74.2 75.3 76.2 74.4 74.6 75.7 75.5 75.3	6 4 2 6 8 2 3 3 8	2 4 1 4 8 2 3 8	1 X 1 4 5 1 4 9	5 X 4 5 4 5 4 5 4	X 8 0 X 0 0	5 1 X 0 0 0	X 4 .4 .8 .6 .6	3 4 X X 2 4 2 1 3 4 2 3 2 3 2 4 3 5
3/31 3/31 4/1 4/1 4/1 4/1 4/2 4/2 4/2 4/2	15.6°N 15.3°N 14.7°N 14.2°N 13.8°N 13.2°N 12.7°N 12.2°N 11.7°N 11.2°N	152.5°W 152.0°W 151.6°W 151.0°W 150.5°W 149.9°W 149.3°W 148.8°W 148.3°W 147.7°W	1200 1800 0000 0600 1200 1800 0000 0600 1200 1800	97 98 97 97 97 98 97 97 97	08 06 06 07 07 07 07 08 07	28 26 27 27 24 26 25 24 27 24	15 02 15 02 01 15 16 18 02 03	8 1 1 0 1 8 8 2 1	1016.6 1017.3 1014.9 1015.6 1014.9 1015.2 1011.5 1013.5 1012.5 1012.9	8 1 7 3 6 1 8 2 7 2	2.0 2.7 1.4 1.7 2.0 3.4 2.4 2.4	73.7	69.7 71.5 71.3 70.5 72.0 73.5 73.1 73.0 72.2	75.6	6 2 7 4 3 6 6 7 6 2	3 1 2 4 3 2 5 7 2 1	9 1 9 2 2 1 9 5 2 2	4 4 5 5 5 5 4 4 4 4 4	0 4 0 0 0 7 6 0 0 4	6 0 0 0 0 0 1 0 0 0 9 0	14 16 17 18 17 18	4 5 4 5 3 6 3 3 7 4 5 3 3 5 3 4 4 4
4/3 4/3 4/3 4/4 4/4 4/4 4/5 4/5 4/5	10.6°N 10.1°N 09.7°N 09.2°N 08.6°N 08.1°N 07.6°N 07.1°N 06.6°N 06.1°N	146.5°W 145.9°W 145.3°W 144.7°W 144.2°W 143.6°W 143.0°W 141.7°W 141.0°W	0000 0600 1200 1800 0000 0600 1200 0600 1200	97 98 97 97 97 97 97 96 96	06 07 05 05 05 06 05 06 04 06	24 25 24 25 20 26 24 25 16	01 03 03 01 14 02 02 02 25 52 50	0 1 1 8 2 2 2 8 5	1011.5 1013.2 1011.9 1012.5 1009.5 1012.5 1009.5 1011.5 1008.1 1009.5	7 2 7 1 7 2 7 2 7 2 7	2.0 2.2 2.0 2.7 2.7 2.7 2.0 3.4 2.0	79.0 78.1 78.0 78.8 79.5 78.2 78.8 81.6 81.0 80.0 80.3	73.5 73.2 73.1 74.1 74.0 75.2 76.6 78.0 77.5 78.0	78.5 78.5 79.0 80.0 80.4 80.8 81.6 81.8 82.0 81.7	2 3 7 6 7 8 8 4 8 8 8	3 1 4 7 8 8 3 8 8 8	2 1 4 4 5 4 7 4 7	5 5 5 4 4 4 4 4 4 4 4	х 8 х х	0 0 0 0 5 0 6 0 X 0	7 9 5 6 6 4 7 6 6	3 4 3 4 4 3 4 4 5 5 4 5 3 6 3 5 3 6 3 5 2 4
4/5 4/6 4/6 4/6 4/7 4/7 4/7 4/7 4/8 4/8	05.3°N 04.6°N 04.0°N 03.7°N 02.8°N 02.1°N 01.8°N 01.0°N 00.8°N 00.0°N	140.3°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.1°W	1800 0000 0600 1200 0000 0500 1200 1700 0000 0600	97 97 97 97 97 97 97 97	11 01 23 31 10 11 12 12 13	13 20 02 07 10 10 09 14 11	51 20 01 03 01 01 00 02 01	2 2 1 2 1 8 0 8 0	1009.8 1007.1 1009.5 1008.5 1006.4 1007.8 1007.1 1008.8 1006.4 1009.8	1 7 2 7 7 2 6 2 7 2	2.0 2.7 1.7 1.4 2.0	81.2 81.5 80.9 80.7 82.7 82.2 81.9 82.0 82.0 80.5	78.0 78.0 77.0 76.5 77.5 77.5 77.5 77.2 77.4 77.0	81.5 83.8 82.2 81.7 83.0 82.6 82.0 81.1 81.8	8 7 3 7 3 3 3 2 1	7 7 3 7 3 X 3 2 2 X	2 4 4 3 X 3 1 X	4 5 5 4 5 X 4 4 5 X	0 X X 0 X 0 6	X 0 0 0 X 0 0 0 X 1 0 1 0 1 X 1	8 9 3 3 5 2 3	3 3 2 2 1 2 2 3 2 2 2 2 2 2 2 2 2 2

1/ All columns in USWB 1210-F are not included here. Those deleted are:

Column	2	Day of week	Column	23	Course of ship
11	3	Octant	11	24	Speed of ship
11	13	Barometer as read	TT.	31	Diff. sea-air, °F.
11	14	Barometer as corrected	11	32	Dew point, °F.
11	17	Air temperature, °F.			

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Table 9. --Weather observations (USWB 1210-F), Hugh M. Smith cruise 45 (cont'd)

							717												-		_	
					V	Vind	[ea- her	Pre	essu	re	Te	mper			С	lou	ıds			W	aves
Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt, change	Dry bulb, °F.	Wet bulb, °F.	Sea water, OF.	Total amount	Amount low	Type low		Type middle	Type high	Direction	Period Height
4/8 4/9 4/9 4/9 4/9 4/10 4/10 4/10 4/11	00.0° 00.9°S 01.2°S 02.0°S 02.2°S 03.0°S 03.0°S 03.8°S 04.0°S	140.1°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.1°W 140.0°W	1200 0000 0600 1200 1800 0000 0700 1200 1800 0000	97 97 97 97 97	07 10 12 12 13 11 16 09 06 09	12 10 12 13 12 12 12 12 08 12 09	02 03 00 01 02 01 00 02 01 02	0 0 1 1 8 0 0 0	1008.5 1007.1 1009.5 1007.8 1010.8 1010.2 1010.2 1009.1 1011.5 1007.5	6 7 2 7 2 7 2 7 0 7	2.0 1.4 1.4 1.4 2.4 2.7 1.4	82.0 82.0 81.5 83.2 84.0 82.2 82.2	77.1 77.3 76.6 77.5 78.8 78.0 77.5 77.0 78.1 77.8	81.7 81.6 81.6 82.0 82.3 82.1 82.3	1 3 7 3 3 1 1 1 2	1 2 X 3 2 1 X 1 2	X 3 2 1 X I 1	X 4 5 X 4	0 X 6 0 X X	X : X : 0 :	13 14 13 14 14 14	2 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
4/11 4/11 4/12 4/12 4/12 4/12 4/13 4/13	02.4°S 01.5°S 00.6°S 00.0° 00.0° 00.0° 00.0° 00.0° 00.0°	140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W	0600 1200 1800 0000 0600 1200 1900 0000 0600 1200	97 97 97 97	06 08 11 11 12 10 14 11	12 08 08 08 12 08 08 10 10	00 00 02 02 02 00 02 02 00 00	0 0 0 0 0 0 0	1010.8 1009.1 1011.5 1007.8 1010.8 1009.1 1012.5 1008.5 1010.5	1 6 1 6 1 6 1 7 2 6	1.0 1.4 2.0 2.7 1.4 1.7 2.0	81.0 82.0 81.2 80.2 80.3 81.9 81.2	76.2 76.5 76.4 77.0 75.5 75.6 76.4 76.2 75.2	81.5 80.9 81.4 80.6 80.5 80.6 81.2	1 1 2 1 1 1 2 2 1 1	1 2 1 1 1 1	I I X I I I X	X 4 4 X 4 5 X	X 0 0 X X 6 6	X I 0 0 8 0 X :	.5 04 09 14 14 17 10	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
4/13 4/14 4/14 4/14 4/15 4/15 4/15 4/15	00.0° 00.0° 00.0° 00.0° 00.0° 00.0° 00.0° 00.0°	140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W	0600	97	18 10 19 10 11 10 11 09 14 11	10 06 08 08 08 07 12 10 14	02 02 02 02 02 02 00 00 00	0 0 0 0 0 0 0	1013.2 1009.1 1011.9 1009.8 1012.9 1009.1 1010.5 1009.1 1010.8 1007.5	1 7 2 6 1 7 2 6 2 7	2.0 2.4 1.7 2.0 1.7 1.7 2.0	81.7 80.5 80.0 81.0 82.1 80.0 81.5 81.8	76.0 75.8 76.2 76.5	82.8 81.1 80.8 80.8 82.1 80.9 80.6 80.4	1 1 1 1 1 1 1 1 1 3	1 1 1 1 1 1 1 1 2	1 1 1 X	X 4 4 5 X	X 0 0 X X 0	0 0 X 0 0 X X 0 9	14 13 14 16 14 17 17	2 2 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 2 2 2
4/17 4/17 4/18 4/18 4/18	00.0° 00.0° 00.0° 00.0° 00.0° 00.0° 00.0° 00.4°N 00.9°N	140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W	1200 1800 0000 0600 1200	97 97 97 97 97	10 12 12 13 13	10 10 12 10 08 07	00 02 03 00 03	0 1 2 1 1	1009.1 1012.9 1009.1 1010.8 1009.8	2 7 2 7 1 7 2 7	2.7 2.0 2.0 2.0 3.4 2.7 2.0 1.7	81.8 80.5 81.5 81.2 81.8 80.4 81.5	76.5 76.6 76.7 76.7 77.4	80.4 81.2 80.6 80.4 80.3 81.3 80.9 80.6	2 7 7 2 8	2 6 6 X X	1 4 4 X X	X 4 4 5 X X	0 X X 0 0 X X	X 1 0 X X	11 10 10 13 13 14 14	2 2 2 2 2 2 2 2 2 2 2 2
4/19 4/19 4/19 4/20 4/20 4/20 4/21	02.0°N 02.9°N 03.4°N 02.6°N 02.0°N 02.0°N 02.0°N 01.4°N	140.0°W 140.0°W 140.0°W 140.0°W 139.9°W 140.0°W 140.0°W 140.0°W 140.0°W	0600 1200 1800 0000 0600 1200 1800 0000	97 97 97 97 97 97 97	10 08 06 13 11 11 18 14	10 10 03 06 12 06 12	00 03 15 15 01 01 15	8 1 8 8 8 0 1	1011.9 1009.5 1012.5 1007.8 1010.2 1009.1 1012.5 1009.1	2 7 2 7 2 6 2 7	2.0 2.0 2.7 2.0 1.7 2.9 2.7	82.0 82.0 82.3 84.0 82.5 82.5 83.8 82.7	77.0 77.8 77.1 77.5 77.5 77.8 78.1 77.0	83.0 83.1 82.9 85.2 83.5 83.0 82.8 82.5	4 4 7 6 3 1 7 4	X 3 5 4 2 1 5 3	X 2 4 8 8 1 2	X 4 4 4 4 4 4	X 3 4 X X 3 0	X 0 1 X X 0 1	13 13 07 09 13 13	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1

Table 9. --Weather observations (USWB 1210-F), Hugh M. Smith cruise 45 (cont'd)

					v	Vind	1	ea-	Pr	essu	re	Te	mper	ature		C	lou	ds		W	aves
Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	high	Direction	Period Height
4/21 4/21 4/22 4/22 4/22 4/23 4/23 4/23 4/23	00.8°N 00.3°N 00.5°S 01.0°S 01.5°S 02.1°S 02.5°S 03.1°S 03.2°S 02.5°S	140.0°W 139.9°W 140.0°W 140.0°W 140.1°W 140.2°W 140.0°W 140.0°W 139.9°W 140.0°W	1200 1800 0000 0600 1200 1800 0000 0600 1200 1800	97 97 97 97 97 97 97 97	12 12 13 14 12 11 07 06 03 03	12 13 12 12 10 06 03 10 12 08	01 01 02 02 02 01 15 02 13 03	0 1 0 0 0 0 0 8 8 0	1010.5 1013.2 1009.8 1012.5 1010.2 1012.2 1008.5 1010.5 1008.5 1011.2	7 2 7 2 7 1 7 2 8 2	2.7 1.7 2.7 2.4 1.0 2.0 1.4	81.1 82.0 82.0 81.5 81.5 83.6 83.5 82.2 81.8	77.1 77.3 77.6 76.6 76.5 77.1 77.8 77.9 78.0 77.3	80.9 81.8 81.5 81.6 82.3 84.1 82.6 82.4	2 4 1 1 1 2 2 5	2 4 1 1 1 1 2 1 4	2 1 1 1 1 3 1 3	4 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14 14 14 14 14 14 12 12 08	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1
4/24 4/24 4/24 4/25 4/25 4/25 4/25 4/26	02.1°S 01.5°S 01.0°S 00.5°S 00.0° 00.1°N 00.1°N 00.2°N 00.2°N	140.3°W 140.0°W 140.0°W 140.0°W 140.0°W 140.0°W 140.1°W 140.1°W 140.2°W 140.2°W	0000 0600 1200 1800 0000 0600 1200 1800 0000 0600	97 97 97 97	06 06 15 10 12 11 09 10	06 06 08 12 12 10 16 12	02 02 02 02 03 02 03 02 01	1 8 0 0 0 0 0 0	1007.8 1009.8 1007.5 1009.5 1007.1 1009.1 1007.1 1009.8 1006.1 1009.8	7 2 7 2 7 2 7 2 7 2 7	1.4 1.4 2.0 1.7 2.0 1.7 2.0	84.8 82.9 82.0 82.8 83.0 81.5 81.5 82.3 82.5	77.0	83.8 82.3 82.0 81.2 81.5 81.0 81.0 81.5 81.0	2 1 1 3 1 2 1 2 1	1 1 2 1 2 1 2	1 X 1 1 1 1	4 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4	0 0 X X X 0 0 0 0 0 X X X 0 0 0 0 0 0 0	11 14 14	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1
4/26 4/26 4/27 4/27 4/27 4/27 4/28 4/28 4/28	00.0° 00.0° 00.0° 00.0° 00.0° 00.1°N 00.7°S 01.7°S 02.5°S	140.0°W 140.0°W 140.0°W 140.0°W 140.1°W 140.1°W 140.0°W 141.2°W 141.2°W	1200 1800 0000 0600 1200 1800 0600 1200 1800	97 97 97 97 97 97 97 97	09 11 11 08 11 13 10 12 13 14	12 08 08 10 12 14 09 06 12	02 02 15 02 02 02 81 03 01 03		1007.1 1009.8 1007.1 1009.8 1008.5 1010.5 1007.8 1009.8 1007.8	6 2 7 2 7 2 7 1 7 2	1.7 2.0 2.0 1.7 1.7 2.0 2.0	81.0 82.7 82.5 80.0 81.5 80.1 82.0 81.1 81.5 83.2	77.5 78.0 78.0 76.4 76.8 76.8 77.0 77.5 77.9	81.0 81.5 81.0 81.0 80.9 81.3 81.2 82.0	1 1 2 2 7 4 8 7 1 3	1 1 2 7 3 8 7 1	1 3 4 4 4 4 4	4 (4 (4 (4 (3 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4	0 0 0 0 0 X X X 1 X X X X X X X X X X X	13 12 12 10 11 14 14 12 12	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1
4/30 4/30	03.4°S 04.3°S 05.1°S 06.0°S 06.8°S 07.6°S 08.8°S 09.5°S 10.3°S 11.2°S	142.3°W 142.8°W 143.3°W 143.6°W 144.3°W 145.2°W 145.2°W 145.5°W 146.0°W 146.3°W	0600 1300 1800 0000	97 97 97 97 97 97 97	10 10 11 10	20 16 18 14	02 03 02 15 15 01 80 01 02 02	1 1 1 0 1 1 0	1008.5 1011.2	2 6 2 7	1.0 1.4 2.0 2.7 1.4 1.7	82.8 83.0 83.0 84.5 84.1 84.0 85.0	77.0 78.0	84.6 84.8 84.6	1 7 2 1	1 4 1	3 · · · · · · · · · · · · · · · · · · ·	3 0 3 2 4 0 4 0	0 0 0 1 0 0 0 X X 6 0 0	15 14 11 12	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
5/1 5/1 5/2 5/2 5/2 5/2 5/3 5/7 5/8 5/8		146.7°W 147.3°W 148.0°W 148.7°W 149.1°W 149.2°W 149.5°W 149.0°W 148.4°W 147.9°W	1800 0000 0600 1200 1800 0000 1800 0000	97 97 97 97 97 97 97	09 12 12 14 09 10 04 01	14 16 12 14 14 16 23 18	02 02 02 02 02 02 02 02 02 02	0 0 0 0 0 0 5 2	1009.5 1009.8 1010.2 1011.9 1010.2 1009.5 1007.5	2 7 3 7 2 7 0 6	2.0 2.0 1.7 1.4 2.0 1.7 0.0	83.5 84.1 83.5 82.6 83.5 83.0 79.4 82.5	78.5 78.0 77.5 76.8 77.6 76.8 75.6 74.9	83.9 84.0 84.2 83.7 83.8 83.9 82.8 83.1	1 2 1 1 1 3 8 7	1 2 1 1 2 8 7	3 · 1 · 1 · 3 · 3 · 7 · 7	4 0 4 0 4 0 4 0 4 0 4 0 4 0	0 0 0 0 0 1 X	12 13 09 10 06 09 04 01	2 2 2 2 2 2 2 2 2 2 2 1 2 1 2 3 2 3 2 3

Table 9. --Weather observations (USWB 1210-F), Hugh M. Smith cruise 45 (cont'd)

					ν	Vind	l .	ea-	Pr	essu	re	Te	mper	ature		C	loc	ıds			W	av	ев
Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Direction	Speed, kt.	Present	Past	Bar, corr., mb.	Characterlstic	Amt, change	Dry bulb, °F.	Wet bulb, °F.	Sea water, ^O F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Helght
5/8 5/8 5/9 5/9 5/9 5/9 5/10 5/10 5/10	16.0°S 15.7°S 15.0°S 14.2°S 13.7°S 13.1°S 12.5°S 11.9°S 11.4°S 10.8°S	147.6°W 147.4°W 146.8°W 146.3°W 145.6°W 144.2°W 144.2°W 142.2°W 142.3°W	0600 1200 1800 0000 0600	97 98 97 97 97 98 97	02 02 02 05 06 05 07 10 11	16 18 12 12 15 14 10 14 14 18	01 01 01 01 02 02 02 02 01 00	8 2 1 1 0 0 0 0 1 0	1009.5 1010.5 1008.8 1009.8 1008.5 1011.2 1008.5 1010.2 1009.1 1011.5	8 1 7 2 7 1 7 2 6 3	1.7 1.4 1.0 2.0 2.0 1.4	83.2 83.8 83.0 83.0 84.5 83.9 83.3	74.8 76.8 75.5 76.3 76.3 77.2 76.0 78.2 77.0 75.2	83.4 83.7 83.3 83.6 83.2 84.0 84.5 83.0	7 6 2 2 2 1 1 1 1	1 2 2 1 1 1 1 1 1	1 2 0 1 1 2 2 1 1 2	4 4 X 4 4 4 4 4 4	4 3 3 8 6 0 0 0 0	0 0 0 0 0 0	01 02 03 04 05 06 06 06 09 10	2 2 2 2 2 2 3 2	2 2 2 2 2 2
5/11 5/11 5/15 5/16 5/16 5/16 5/16 5/17	10.3°S 09.8°S 09.3°S 09.2°S 09.1°S 09.1°S 09.2°S 09.2°S 09.2°S	141.7°W 141.0°W 140.3°W 139.3°W 138.7°W 138.1°W 137.4°W 136.8°W 136.1°W	0600 1200 1800 0000 0600 1200 1800 0000	98 97 97 97 98 97 97	11 11 07 09 13 11 10 11	18 17 12 12 14 16 10 13 12	03 01 02 03 02 02 02 02 03 02	0 1 0 0 0 0 0 0	1007.1 1009.1 1007.5 1011.9 1007.5 1010.2 1008.8 1011.9 1009.5 1011.5	7 2 6 2 6 2 7 1 7 2	1.7 1.0 2.0 1.4 1.5 0.7 2.0 2.0	83.0 80.0 82.9 82.8 82.2 81.6 82.2 82.5	76.2 78.0 76.8 76.6 77.0 76.0 75.7 76.2 75.2	83.8 83.0 83.1 83.1 82.6 82.4 82.8 82.7	2 2 1 2 2 1 1 2 3 2	2 1 2 1 1 1 1 1	1 2 1 1 1 1 2 1	4 4 4 4 4 4 5 X	0 0 0 0 0 0 0 1 8	0 0 0 5 0 0 0 8	10 08 09 10 12 10 11 09	3 3 3 3 2 2 3	3 3 2 2 2 2 2 2
5/17 5/17 5/18 5/18 5/19 5/20 5/20 5/20 5/20 5/21	09.2°S 09.2°S 09.2°S 09.2°S 09.2°S 09.2°S 09.2°S 09.2°S 09.3°S 09.2°S	137.0°W 137.7°W 138.5°W 139.1°W 140.1°W 140.7°W 141.3°W 142.0°W 142.6°W 143.2°W	1800 0000 0600 1800 0000 0600 1200 1800	97 98 99 99 98 98 98	08 08 08 13 10 10 12 10 07	10 14 08 12 18 10 17 14 12	02 03 02 01 02 02 02 02 01	0 0 0 0 0 0 0 0	1010.5 1012.2 1008.8 1010.8 1013.2 1009.8 1011.5 1010.5 1012.9 1009.1	6 1 7 2 2 7 2 7 1	1.4 2.7 2.0 1.4 2.0 1.4 1.4	82.9 XXX 82.2 82.9 83.8 83.2 82.4 83.8	75.5 74.9 76.8 75.5 75.3 76.2 77.0 75.3 76.3 77.3	82.8 83.2 82.8 83.1 83.6 83.2 83.8 84.0	1 3 2 1 2 2 2 2 1 1	1 1 2 1 2 2 2 2 1 1	1 1 1 4 2 X 1 2		0 0 0 0 0 0 X 0 4 0	5 2 0 0 1 X 0 0	09 08 10 08 10 08 10 10	2 2 2 1 2 2 2 2	1 2
5/22 5/22 5/23 5/24 5/24	09.2°S 08.9°S 08.8°S 08.1°S	143.1°W 142.4°W 141.8°W 141.1°W 140.6°W 140.2°W 139.7°W 139.7°W 139.7°W	1200 1800 0000 0600 1800 1800 0000 0600	97 97 98 98 98 98	10 10 12 09 09 06	20 18 12 14 12	81 03 03 02 01	8 8 0 1 1		3 1 1 7 2	1.4 1.4 2.4 1.7 1.4 1.7 2.2	81.0 83.3 82.8 80.3 83.1 82.7 82.7	76.5 75.8 74.3 75.5 75.3	83.0 83.8 83.5 82.8 83.1 82.8 83.2 82.7	5 3 1	4 1 2 1 1	X 2 9 5 2 2 1	X 4 4 4 4 5 4	X 0 0 0 0 0 0	X 0 0 5 2 8 0	10 09 13 09 08	2 2 2 2 2	2 2 2 2 3 2
5/25 5/25 5/25 5/25 5/26 5/26 5/27 5/28	05.7°S 05.6°S 06.4°S 07.1°S 07.7°S 08.4°S 09.6°S 10.3°S	139.6°W 139.6°W 139.6°W 139.6°W 139.7°W 139.7°W 139.7°W 139.7°W	0000 0600 1200 1800 0000 0600 1800 0000	97 97 97 96 97 97	07 10 00 08 23 12 08 05	06 07 00 15 07 07 22 13	02 02 03 15 15 02 03	0 0 0 6 8 1 0	1008.8 1011.2 1012.2 1009.1	7 2 7 1 7 1 2 7	2.0 2.0 0.7 2.0 2.4 2.0 1.7	82.3 81.7 81.0 79.8 80.9 81.6 81.9 82.2	75.3 74.2 74.8 75.2 75.3 74.1 73.3 74.8	83.8 82.7 82.7 82.4 83.2 82.9 82.9 83.2	1 1 2 7 7 2 2 5	1 1 7 7 2 1 5	2 1 7 9 2 2 4	5 4 4 8 X 4 4	0 0 0 0 0 X 0	0 0 1 0 0 X 2 0	07 10 10 09 10 09 09	3 3 2 2	2 1 0 2 2 1 2 2

Table 9. -- Weather observations (USWB 1210-F), Hugh M. Smith cruise 45 (cont'd)

					ν	Vind	1	ea-	Pre	essu	re	Te	mper	ature			lou	ıds			w	aves
Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry buib, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period Height
5/28 5/28 5/29 5/29 5/29 5/29 5/30 5/30 5/30 6/1	11.5°S 12.1°S 12.6°S 12.7°S 12.0°S 11.3°S 10.7°S 10.1°S 09.4°S	139.7°W 139.7°W 139.7°W 139.7°W 139.7°W 139.7°W 139.6°W 139.6°W 140.5°W	1800 0000 0600 1200	98 98 98 97 98 98	06 02 02 35 02 02 01 02 05 03	12 13 16 10 15 09 08 03 11	02 02 02 02 02 02 02 02 02 02	0 0 1 1 2 1 0 0 0	1010.5 1012.9 1009.8 1013.2 1011.2 1013.2 1009.5 1011.9 1011.2	7 2 7 1 7 1 7 3 7 2	2.4 2.4 2.0 1.4 1.7 2.7 1.4 0.7	82.8 83.8 82.5 81.2 82.6 82.8 82.2	76.8 76.2 77.2 76.0 75.6 75.7 74.8 74.6 75.2	82.7 82.9 82.5 82.8 82.8 83.4 83.3 82.6	1 2 6 5 4 2 3 3 4 6	1 2 2 4 4 2 2 2 4 6	1 2 2 4 2 2 2 2 5	4 4 5 6 4 4 5 5 5 4	0 0 0 X 0 0 0 0	0 4 X 0 0 1 5		3 1 2 2 2 2 2 2 2 2 2 2 2 2 2 1 2 1 2 2
6/2 6/2 6/2 6/2 6/3 6/3 6/3 6/4 6/5	08.2°S 07.9°S 07.9°S 07.9°S 07.9°S 08.1°S 08.1°S 08.4°S 08.9°S	140.7°W 140.7°W 140.7°W 140.3°W 139.9°W 139.6°W 139.6°W 139.4°W 139.3°W	0600 1200 1800 0000 0600 1200	98 98 98 96 97 97	05 06 05 05 08 08 09 08	12 13 10 16 10 14 17 16 11 20	01 02 16 02 01 83 01 01 02 01	1 0 0 0 0 1 1 0 0	1008.5 1010.8 1009.8 1011.5 1008.5 1010.5 1012.2 1009.1 1010.5	7 2 8 3 7 2 8 2 6 8	2.4 1.4 2.0 2.0 1.7 1.0 2.0	81.3 83.1 82.3	73.8 74.0	82.9 83.3 83.0 83.3 83.0 82.8 82.8	1 1 1 1 8 2 1 2 2	1 1 1 1 8 2 1 2	2 1 9 2 1 7 2 2 2 2	4 4 4 5 5 4 4 5 4	0 0 0 0 0 X 0 0 0	0 0 0 X 0 0	06 06 05 08	2 2 2 2 2 0 2 1 2 1 2 1 2 2 2 2 2 2 2 2
6/5 6/6 6/6 6/7 6/7 6/8 6/8 6/9 6/9	09.3°S 09.6°S 09.9°S 09.7°S 10.2°S 10.6°S Omoa, I 10.1°S 09.6°S 09.6°S	139.2°W 138.8°W 139.0°W 139.1°W 138.8°W 138.7°W Fatu Hiva 139.1°W 139.8°W	1800 0000 1800 0000 1800 0000 0600 1800 0000 0600	98 98 98 98 98 98 97 98 98	10 09 10 07 10 08 11 07 09	22 18 14 20 17 09 08 09 12	01 02 00 02 15 03 02 02 02	1 0 0 1 1 1 0 0	1011.5 1008.5 1012.2 1008.1 1013.2 1010.5 1012.2 1012.9 1009.8 1012.5	2 7 2 7 2 7 2 2 6	2.4 1.4 2.0 2.4 2.0 1.4 1.4 2.0		76.8 75.8 76.0 75.3 75.8 72.8 74.6 75.3	82.8 82.8	1 1 3 5 3 2 1 2 1	1 1 2 3 3 2 1 1 1	2 2 2 2 2 2 1 2 2 2	4 5 4 5 5 5 5 5 5 5 5 5	0 0 0 0 0 0 0 0 0	0 5 1 0 0 0 5	10 09 10 06 09 08 27 09 09	2 3 3 3 2 3 2 3 3 3 3 3 2 0 2 0 2 1 2 1
6/13 6/13 6/14 6/14	07.9°S	139.8°W 139.8°W 140.1°W 140.1°W 139.5°W 139.0°W 139.2°W 139.2°W 139.2°W	1200 1800 0000	98 98 97 98	09 10 09 11	14 11 10 10	02 15 01 01 02 02 15 01	0 0 8	1011.9 1014.6 1011.9 1012.9 1012.5 1011.9 1013.5 1011.2 1012.9 1011.2	6 2 7 2	1.7 2.0 0.7 2.4 1.0 1.7 1.7	82.6 82.7 82.9 81.6 81.0 82.7 82.1	76.0 76.1 77.4 77.0	82.3 82.3 83.1 82.3	1 3 6 1	1 2 5 1	1 1 9 X	4 4 4 X	0 5 0 0 0 6 X	0 0 0 1 0 X	08 07 11 09 12 12 10	2 2 2 2 2 2 2 2 3 3 3 2 2 1 4 1 2 1 2 1
6/15 6/15 6/15 6/15 6/16 6/16 6/16	01.7°S 00.8°S 00.0° 00.5°N 01.1°N 01.9°N 02.6°N	139.5°W 139.6°W 139.7°W 140.0°W 140.5°W 141.1°W 141.7°W 142.2°W 142.6°W	0600 1200 1800 0000 0600 1200 1800	98 98 97 98 98 97 98	08 10 09 11 12 11 10	10 12 08 10 08 12 11	01 00 02 02 02 02 02 02	1 0 0 1 1 0 0	1012.9 1010.5 1011.5 1010.2 1011.9 1008.8 1009.1 1008.5 1010.2	6 1 8 1 7 2 7 2	2.0 1.7 1.5 1.0 2.0 1.7 2.0	82.0 80.8 79.0 81.2 82.0 81.9 81.6 82.4	77.0 76.1 75.8 76.0 76.0 76.2 75.5 75.0	82.1 80.7 80.4 81.1 83.0 82.9 82.8 82.8	6 X 1 2 6 1 1 3	6 X 1 2 6 1 1 3	2 X 1 2 2 1 2 2	6 X 4 5 4 X 0	0 X 0 0 0 0 X 0	0 0 0 0 0 X 0	11 10 08 12 11 11	2 2 2 1 2 1 2 0 2 0 2 0 3 1 2 1 2 1 2 1

Table 9. -- Weather observations USWB 1210-F , Hugh M. Smith cruise 45 (contic)

					ų	Find		ea-	Pr	essi	re.	Te	mper	lture		C	loud	s		W	ave	s
Date, 1958	Latitudo	Longitudo	Tine, GCT	Vinibility	Direction	Speed, kt.	Propent	Pant	Bar, corr., mb.	Characterlatic	Amt, change	Dry balb, oF.	Wet bulb, oF.	Sen water, OP.	Total amount	Amount low	Type tow	Type middle	Type bigh	Direction	Period	Fleight
s:17 s:27 s:18 s:18 s:18 s:18 s:18 s:18 s:19	04.1°N 04.7°N 05.4°N 06.1°N 06.8°N 07.4°N 07.9°N 08.6°N 09.2°N 09.2°N	143.C°W 143.4°W 143.8°W 144.2°W 144.7°W 145.1°W 145.c°W 146.2°W 146.2°W 147.2°W	0±00 1200 1300 0500 0±00 1200 1300 0±00 0±00	8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	3399396643	13 13 13 15 09 14	03310025200		1009.8 1008.3 1011.2 1009.5 1011.2 1010.2 1012.2 1010.8 1011.5	3 3 3 3 3 7 3 7	1.4 2.0 1.4 1.7 1.7 1.4	52.1 52.0 75.0 50.2 51.7 \$1.5 52.5 52.5 82.9 81.6	76.2 75.5 76.0 77.5 77.5 72.1 76.0	\$3.0 \$3.2 \$2.9 \$3.0 \$3.5 \$3.2 \$2.8 \$3.2 \$2.7 \$2.7	1 2 3 8 X 2 2 3 2 6	1 2 8 8 X 2 3 6	2 · 9 · X · 2 · 3 · 2 · 2 · 2	£ 0 £ 2 £ 3 £ 0 £ 0	0 0 X X X X X X 0 0 3 2	05 09 05 06 05 04	3 3 2 2 2 2 2 2 2	1 2 1 1 2 2 2 2 2 2 2 2
5 19 5 20 5 20 5 20 5 21 5 21 5 21 5 21 5 22	10.0°28 11.3°28 12.0°28 12.0°28 13.3°28 14.0°28 14.1°28 15.3°28 16.0°28 15.1°28	14T.9° W 148.5° W 149.1° W 149.5° W 150.1° W 150.6° W 151.6° W 151.6° W 152.2° W	1800 0300 0500 1200 1800 0600 0600 1203 1800 0000		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	16 21 22 15 21 22 20 18 16 15	25 15 01 00 60 02 03 01 20 02	6 6 6 X 5 2 2 H 11 H	1012.2 1011.5 1012.9 1013.2 1014.2 1013.9 1014.9 1014.6 1016.6	3 6 2 7 6 2 6 1 7	0.7 2.0 1.4 1.4 1.4 1.4 2.0	\$0.6 81.4 \$0.0 77.7 75.3 73.3 77.1 77.0 78.9	77.6 77.5 77.0 76.0 75.3 74.0 72.5 72.0 71.6 71.1	\$2.0 \$2.0 \$0.5 79.2 79.7 79.1 78.0 77.8 77.1	7644856272	5 4 X 6 3 6 2 7 2	2 X : 7 4 4 2 7	X 3	7 5 X X X X X X S 9 X X O 0	04 05 05 06 06 05 05	2 2 2 2 2 2 2	2 4 3 3 3 2 2 2 2
6 22 5 22 5 23 5 23 5 23 5 23	17.2°27 17.8°27 16.4°27 19.0°37 19.6°27 21.2°37 21.1°27	153.7°W 154.3°W 155.1°W 156.4°W 156.4°W 156.9°W	0600 1206 1806 0860 0606 1200	999999999999999999999999999999999999999	05 05 06 12 23 07 05	16 09 13 18 13 17 14	02 50 01 03 03 00	0 0 0 0 8 1 8	1015.2 1015.2 1016.3 1014.9 1014.2 1014.2	3 6 2 6 2 7	I.4 I.4 0.9 1.0 0.7	76.2 76.3 77.4 77.9 77.2 76.2 76.8	69.7 71.0 71.3 71.6 71.0 71.9	77.1 76.9 77.1 77.7 77.9 77.6 77.8	2 4 1 3 7 3 6	2313334	7 4 3 2	5 (3 3 4 (6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	X X 0 0 0 0 5 0	05 04 09 28 06	2 2 2 2	2 2 2 1 1 1 2

Table 10. --Surface salinity and temperature observations taken at locations other than bathythermograph lowerings, Charles B. Gilbert cruises 35 and 38, and Hugh M. Smith cruises 43 and 45

	Date,	Times	TOBICION		. Vallilley .		1	17:11:0	1 1016	LOSITION.		in the state of the	1
Vessei	GCT	CCT	Latitude	Latitude Longitude	00%	. F.	Vebrier	CCT	CCT	Latitude	Latitude Longitude	n/ou	0 151
CHG-35	10/13/57	1800	8,95,80	140°05'W	35.75	82.2	CHG-38	2/26/58	15-10	08°56'8	140°05¹W	45,89	84.1
Ξ	10/23/57	1520	Ξ	Ξ	35.81	81.6	Ξ	Ξ	2315	08*5845	W160-03-1	1	86.5
=	11/29/57	2300	09°48'S	139°02°W	35.64	2.28	Ξ	3/3/58	1728	81.69 60	139-05 W	35.80	84.0
=	12/3/57	0105	8.95.80	140°05°W	35.73	83.0	=	3/9/58	7170	8,98,80	140°05'W	15,95	N.4.4
HMS-43	1/15/58	1846	8195"80	140°05'W	35.75	85.5	Ξ	Ξ	1613	=	=	35,84	83, 5
=	1/16/58	1800	08°54'S	140"02'W	34.04	83.4	=	3/10/58	9770	08"58'S	140" 10'W	34.08	14.4
=	1/17/58	1430	8.05.80	140"02'W	35.71	83.5	Ξ	3/24/58	1603	8,98,80	140"05'W	35.96	84.1
=		1908	08°58'5	140°10'W	35.52	84.4	=	3/25/58	1605	11	=	35.93	84.0
=	=	9561	=	Ξ	32.12	83.0	Ξ	4/2/58	1740	08"5855	140°10'W	35, 59	8.4. 3
=	1/21/58	0554	08°55'8	139°32'W	35.73	83. L	Ξ	4/9/58	1805	68 " 54 55	140"02'W	345, 89	14.1.
Ξ	1/22/58	2550	09"48'5	139°02'W	35.75	6.28	=	4/10/58	1545	8,99,80	140"05'W	345.95	84.4
Ξ	1/22/58	1526	=	Ξ	35,70	82.0	Ξ	4/15/58	1620	8,69,60	W 1 39 " 06 t W	36.05	14.4
=	1/25/58	1550	Si 07 60	140"04'W	35.81	83.2	Ξ	4/19/58	7 300	2,95 "80	140"05'W	15,95	86. 3
Ξ	Ξ	2100	08"58'S	140°10°W	23.48	83.6	=	4/20/58	0020	8,88,30	W 101 " 10 t W	33.62	85.6
=	1/26/58	1556	8195.80	140°05'W	35. HZ	87.8	Ξ	=	1605	8.99.80	W140"051	15.98	H. H.
Ξ	1/27/58	1530	08 "54'S	W120"0F1	29.83	83.3	HMS-45	5/12/58	2215	OH " 58'S	140°09'W	10.61	R-1, B
=	==	~	Ξ	Ξ	35.52	83.3	Ξ	5/13/58	1530	OR" \$455	M + 20 " 0 F I	14.41	81.5
Ξ	=	2	11	Ξ	67.34	83.0	Ξ	=	8107	85,80	M-70-01	34, 56	H5.5
=	12	5261	8.08.80	140°02'W	55.70	R 3. H	Ξ	5/18/58	2225	818818	W160"0F3	15. 52	B4, 5
=	Ξ	5017	=	140"04'W	35, 12	84.2	=	5/22/58	1910	=	Ξ	55,60	16.5.15
Ξ	85/8/2	1554	08"56'S	140"05"W	35.75	83.0	Ξ	88/9/9	1540	S. 311 60	W 1.50 " Q 1	14,74	14.0
==	2/4/58	0.043	8,85,80	140" IO'W	12.54	80.8	Ξ	Ξ	5512	09°46'5	W * 810 " 68 1	13.96	84.0
=	11	1520	08.54'S	140°00'W	14.92	17.78	=	84/11/9	11840	8888880	W100"011	1-1, 16.1	82.0
Ξ	=	1700	Ξ	140"021W	H. 55	7.17	Ξ	=	2240	8118 80	140"02"W	27.73	BZ.0
=	Ξ	2122	Ξ	Ī.	25.05	87.0							
=	85/5/2	0150	08"56'S	140"05"W	35.68	14.6							
=	8/8/2	1800	=	139"32"W	33.53	82.2							
Ξ	=	2035	=	W128-981	25,03	87.0							
Ξ	4/12/58	1650	8,05 ,80	140"62'W	35.77	HI. 5							
Ξ	2/13/58	0045	8,98,80	140"65'W	35.75	85.8							
=	2/14/58	2014	08"5845	140"10'W	53.53	85, 3							
-	2/15/58	01177	11173 BU	140 º 0 C. t W	11. 71	1 (1)							

Table 11.--Transparency, water color, and related observations, Charles H. Gilbert cruise 35

Date,	Time,	Posi	tion	Secchi disc,	Water color	Sea 1/	Wind2/	Percent
1957	LT	Latitude	Longitude	meters	(Forel)	Sca	Willia	cover
10/14	1145	08°23'S	140°32'W	27.4	2.0	2	07-15	70-80
10/14	1100	07°47'S	140°02'W	29.3	2.0	2	08-10	60
10/16	1100	08°40'S	139°20'W	30.2	2.0	2	09-12	70-80
10/17	1100	09°32'S	138°52'W	25.6	2.0	2	08-09	70-80
10/18	1110	10°15'S	138°34'W	-	2.0	3	10-18	90
10/19	1110	09°59'S	139°11'W	21.9	2.0	4	11-17	100
10/20	1115	09°30'S	139°56'W	32.9	2.0	2	12 - 14	20-30
10/24	1100	09°06'S	139°11'W	28.3	2.0	3	09-15	50
10/25	1100	09°18'S	136°22'W	33.8	2.5	2	09-10	20-30
10/26	1100	09°13'S	137°37'W	32.9	2.0	1	09-12	100
10/29	1100	11°20'S	139°25'W	30.2	2.0	3	07-17	100

 $[\]frac{1}{2}$ Sea state coded according to H. O. Pub. No. 606-c, second edition, 1956.

Table 12. -- Transparency, water color, and related observations, Hugh M. Smith cruise 43

Date,	Time, LT	Position		Secchi disc,	Water	Sea-1/	Wind2/	Percent
1958		Latitude	Longitude	meters		Sea-	wind-	sky
l	<u> </u>			L	(Forel)	L		cover
1/18	1230	08°27'S	140°41'W	17.4	3	3	NE-18	60
1/19	1231	07°52'S	140°10'W	17.4	3	4	NE-14	40
1/20	1227	08°52'S	139°12'W	12.8	3	4	NE-15	60
1/21	1300	09°29'S	138°52'W	13.7	3	3	NE-14	20
1/22	1227	10°08'S	138°47'W	17.4	3	3	NE-12	60
1/23	1229	09°57'S	139°26'W	11.9	3	2	N -11	60
1/24	1200	09°34'S	139°50'W	15.5	3	2	NE-10	40
1/28	1215	09°18'S	137°48'W	14.6	3	3	E -16	70
1/29	1220	09°10'S	136°46'W	26.5	3	2	NE- 8	40
1/30	1231	09°12'S	139°23'W	11.9	3	3	NE-16	80
1/31	1232	11°19'S	139°38'W	14.6	3	3	E -18	40
2/1	1232	12°14'S	139°38'W	17.4	3	3	E -12	30
2/2	1232	09°32'S	139°4 0' W	18.3	3	3	E -14	70
2/5	1245	09°12'S	140°32°W	18.3	3	3	E -16	20
2/6	1245	09°03'S	142°35'W	17.4	3	3	E -13	30
2/7	1240	09°10'S	141°22'W	18.3	3	4	E -18	01
2/9	1234	08°13'S	139°40'W	17.4	3	3	E -18	50
2/10	1233	05°54'S	139°30'W	27.4	3	3	E -14	10
2/11	1232	07°32'S	139°34'W	18.3	3	2	E -11	30

 $[\]frac{1}{2}$ Sea state coded according to H. O. Pub. No. 606-c, second edition, 1956.

^{2/} Wind direction and speed coded according to U. S. Weather Bureau, Circular M.

 $[\]frac{2}{2}$ Wind direction in compass points (true), and speed in knots.

Table 13. -- Transparency, water color, and related observations, Charles H. Gilbert cruise 38

Date, 1958	Noon position 1/ Latitude Longitude		Secchi disc, meters	Water color (Forel)	Sea 2/	Win d 3/	Percent sky cover
2/27	08°34'S	140°36'W	22.9	3-4	2	NE - 7	30
2/28	07°42'S	140°10'W	25.6	3	3	NW - 6	30
3/1	08°42'S	139°18'W	25.6	3	2	NNW- 7	60
3/2	09°28'S	138°53'W	25.6	3	2	ENE-11	20
3/3	10°06'S	138°52'W	25.6	3	2	NE - 10	40
3/4	10°02'S	139°06'W	18.3	4	2	NE - 14	20
3/5	09°36'S	139°48'W	27.4	3	2	NE - 7	20
3/6	09°34'S	139°49'W	21.9	4	3	NE - 15	20
3/26	09°10'S	138°58'W	22.9	3	3	E - 9	50
3/27	09°12'S	136°36'W	28.3	4	3	E - 8	50
4/11	08°32'S	140°40'W	26.5	3	2	NE - 9	20
4/12	07°50'S	140°06'W	25.6	3	2	E - 11	40
4/13	08°44'S	139°32'W	21.9	3 - 4	3	E - 14	20
4/15	10°12'S	138°50'W	19.2	3-4	3	E - 14	70

 $[\]frac{1}{2}$ All observations taken at 1200 LT.

Table 14.--Transparency, water color, and related observations, Hugh M. Smith cruise 45

Date,	Time,	Position		Secchi disc,	Water color	Sea 1/	Wind 2/	Percent sky
1958	LT	Latitude	Longitude	meters	(Forel)	Dea	Willia	cover
5/15	1205	09°14'S	138°58'W	31.1	3	2	10-12	20-30
5/16	1210	09°10'S	136°27'W	29.3	2	2	10-12	20-30
5/17	1210	09°16'S	138°03'W	29.3	2	2	09-12	20-30
5/19	1210	09°16'S	140°28'W	25.6	3	2	09-20	20-30
5/20	1210	09°17'S	142°54'W	27.4	2	2	09-14	10
5/21	1210	09°14'S	141°21'W	27.4	2	2	13-15	70-80
5/23	1210	08°24'S	139°40'W	31.1	2	2	08-14	70-80
5/24	1220	05°58'S	139°36'W	32.9	2	1	10-05	20-30
5/25	1215	07°24'S	139°42'W	32.9	2	2	08-05	20-30
5/27	1215	10°00'S	139°40'W	23.7	3	2	08-18	20-30
5/28	1215	12°20'S	139°43'W	31.1	2	2	02-17	50
5/29	1210	10°55'S	139°45'W	32.9	2	2	02-12	40
6/1	1210	08°29'S	140°38'W	29.3	2	2	04-16	20-30
6/2	1210	07°45'S	140°12'W	31.1	2	1	05-14	10
6/3	1220	08°40'S	139°20'W	32.9	2	2	08-14	10
6/5	1300	09°28'S	138°54'W	21.9	2	3	09-16	40
6/7	1210	10°19'S	138°30'W	25.6	2	3	09-18	10
6/8	1210	09°48'S	139°29'W	31.1	2	2	06-14	20-30

 $[\]frac{1}{2}$ Sea state coded according to H.O. Pub. No. 606-c, second edition, 1956.

^{2/} Sea state coded according to H.O. Pub. No. 606-c, second edition, 1956.

 $[\]frac{3}{2}$ Wind direction in compass points (true), and speed in knots.

 $[\]frac{2}{}$ Wind direction and speed coded according to U. S. Weather Bureau, Circular M.

Table 15. -- Zooplankton station data and sample volumes, Charles H. Gilbert cruise 35

Sta-	Sta- Sam- Date,		Time,	Position		Depth,	Water	Volume,
tion	ple	1957	+10 ZT	Latitude	Longitude	m.	strained, m.3	cc./1000 m.3 1/
1	1	10/4	0001-0032	17°40'N	155°12'W	0-140	1830.6	18
2	1	10/5	0000-0031	14°40'N	153°11'W	11	1707.5	15
3	1	10/6	0000-0030	11°42'N	151°30'W	11	2515.0	18
5	1	10/8	0000-0031	05°53'N	147°52'W	11	2465.6	24
6	1	10/9	0000-0030	03°10'N	146°18'W	11	2369.0	31
7	1	10/9-10	2358-0030	00°17'N	144°32'W	11	2307.2	37
9	1	10/11-12		06°00'S	141°53'W	11	2363.6	17
18	1	10/21	0639-0711	09°34¹S	139°50'W	11	2185.1	30
19	1	Lt	0714-0745	11	11	11	2112.5	39
20	1	H	0935-1005	21	11	11	1927.0	31
21	1	11	1008-1037	11	11	11	1895.9	36
22	1	11	1235-1305	11	11	11	1789.0	41
23	1	11	1306-1334	11	11	11	1860.8	39
24	1	11	1532-1603	11	11	11	2082.5	38
25	1	11	1606-1637	11	11	11	2068.2	47
26	1	† T	1833-1905	11	11	11	2331.2	67
27	1	11	1907-1937	11	11	11	1842.2	58
28	1	11	2135-2205	11	11	21	1735.6	79
29	1	11	2206-2238	31	11	0-143	1979.1	69
30	1	10/22	0043-0113	11	11	0-140	2039.6	70
31	1	11	0114-0144	11	tt	II.	2078.5	62
32	1	11	0331-0359	11	11	11	1733.9	86
33	1	11	0401-0432	11	11	11	2073.1	73
35	1	10/24	2201-2229	09°16'S	137°52'W	0-182	1681.0	2.0
36	1	11	2233-2301	11	11	0-140	1546.8	20
38	1	10/25	0159-0230	09°22¹S	137°30'W	11	1316.0	24
38A	1	11	0232-0301	11	11	11	1487.2	27
38B	1	11	2156-2227	09°14'S	136°20'W	11	1760.4	18
39	1	11	2229-2301	11	11	11	1797.9	19
41	1	10/26	0158-0229	09°14'S	136°34'W	0-173	1750.1	25
42	1	11	0230-0301	11	130 34 11	0-140	1694.2	25
44	1	11	2159-2229	09°17'S	139°02'W	11	1486.1	22
45	1	11	2231-2303	11	11	11	1582.7	21
47	1	10/27	0154-0224	09°17'S	139°16'W	11	1558.2	37
48	1	11	0226-0257	11	11	11	1463.9	46
50	1	11	2200-2230	11°03'S	139°33'W	11	1530.1	34
51	1	11	2232-2300	11	11	21	1354.9	34
53	1	10/28	0158-0228	11°22'S	139°27'W	11	1533.9	33
54	1	11	0230-0301	11	11	11	1655.9	40
55	1	U.	2200-2231	12°23'S	139°36'W	11	2011.0	38
56	1	11	2232-2300	11	11	11	1722.6	38
58	I	10/29	0158-0227	12°09'S	139°30'W	11	1527.4	37
59	1	11	0229-0258	11	139 30 11	11	1453.1	38
60	1	10/30	0200-0228	09°36'S	139°44'W	11	1134.0	41
61	1	H	0229-0300	11	11	11	1336.5	36
62A	1	11/1	2158-2229	07°20'S	139°32'W	11	1663.2	32
63	1	31	2231-2259	11	11	11	1414.5	41
65	1	11/2	0157-0227	07°06'S	139°30'W	11	3365.6	23
66	1	11	0232-0300	П	11	11	1633.8	43
67	1	11	2157-2227	06°04'S	139°50'W	11	1788.8	18
68	1	11	2229-2300	11	II	Ħ	1915.1	30

^{1/} All fish, fish eggs, jellies >2 cm. in length, and other organisms >5 cm. in length are not included.

Table 15. -- Zooplankton station data and sample volumes, Charles H. Gilbert cruise 35 (cont'd)

Sta-	Sam-	Date,	Time,	Pos	ition	Depth,	Water	Volume,
tion	ple	1957	+10 ZT	Latitude	Longitude	m.	strained, m. ³	cc./1000 m. 3 1/
70	1	11/3	0202-0233	06°26'S	139°52'W	0-140	1807.4	28
71	1	11	0249-0319	11	11	11	1755.8	44
73	1	11	2205-2234	08°36'S	139°31'W	11	1390.0	27
74	1	11	2235-2305	11	17	11	1408.0	28
76	1	11/4	0200-0230	08°54¹S	139°38'W	11	854.4	55
77	1	11	0234-0304	11	f1	11	715.8	71
79	1	11	2158-2228	09°13'S	141°35'W	11	2218.6	23
80	1	11	2231-2302	11	11	11	2168.1	33
82	1	11/5	0156-0226	09°12'S	142°00'W	11	1813.9	29
83	1	11	0228-0256	11	£1	11	1786.6	24
84	1	11	2159-2229	09°15'S	142°46'W	11	1490.9	32
85	1	11	2232-2304	11	11	11	1580.6	33
87	1	11/6	0158-0229	09°18'S	142°23'W	11	1496.6	25
88	1	11	0234-0303	11	11	11	1449.6	31
90	ī	11	2156-2226	09°15'S	140°33'W	11	1267.4	43
91	1	11	2228-2258	11	11	11	1192.9	48
93	1	11/7	0158-0228	09°13'S	140°10'W	11	1264.4	62
94	1	11	0232-0302	11	11	11	1074.6	64
97	1	11/9	0034-0104	11°20'S	142°19'W	tt	1535.8	61
99	1	11/10	0032-0102	13°45'S	144°54¹W	11	1738.3	30
103	î	11/14	0000-0031	16°53'S	148°58'W	T f	1893.8	11
104	1	11/19	0000-0031	16°29'S	148°24'W	11	1863.0	10
106	i	11/20	0000-0030	14°46'S	145°48'W	11	1886.8	36
107	i	11/21	0000-0031	12°28'S	143°33'W	11	1663.5	36
108	ī	11/22	0000-0030	10°14'S	141°18'W	11	1390.5	67
119	ī	12/1	0508-0538	09°34'S	139°50'W	11	1705.9	33
120	î	17	0539-0611	11	139 20 1	0-143	1936.4	27
121	1	11	0805-0836	11	11	0-140	1709.6	23
122	1	11	0839-0908	11	11	11	1917.3	23
123	1	11	1105-1137	11	11	11	1681.6	23
124	i	11	1139-1210	11	11	11	1599.5	21
125	1	11	1406-1437	11	11	0-142	1765.8	20
126	1	11	1439-1510	11	11	11	1809.0	21
127	î	H	1705-1735	11	11	0-140	1361.9	32
128	î	11	1736-1807	11	11	11	1352.2	45
129	i	11	2003-2033	11	11	11	1375.9	33
130	1	11	2034-2106	11	11	11	1503.4	46
131	I	11	2305-2335	11	11	11	1481.8	39
132	1	12/1-2	2337-0006	11	11	11	1516.9	37
133		12/1-2		11	11	11	1564.6	44
134	1	12/2	0204-0234 0236-0305	11	11	11	1649.7	98
134	1 1					11	1728.8	28
136	1	12/5	0000-0030	05°55'S	141°56'W	0-147		16
138		12/6	0000-0030	02°55'S	143°32'W	0-147	1895.1 2282.6	31
	1	12/7	0000-0030	00°18'N	145°54'W	11		
139	1	12/8	0000-0028	03°06'N	146°44'W	11	2178.6	34 25
140	1	12/9	0000-0031	06°08'N	148°28'W	11	2148.7	15
141 142	I	12/10	0000-0031	09°10'N	150°10'W 152°14'W	11	2399.8 2255.6	14
142	I	12/11	0000-0031	12°09'N	152 14 W			14

^{1/}All fish, fish eggs, jellies >2 cm. in length, and other organisms >5 cm. in length are not included.

Table 16. -- Zooplankton station data and sample volumes, Hugh M. Smith cruise 43

Sta- Sam- ple	/1000 m. 3 <u>2</u> / 11 6 14 33 27 18 30 43 89
2 1 1/6 2012-2045 15°03'N 153°57'W 0-145 1899.8 3 1 1,7 2011-2042 12°13'N 152°12'W 0-155 1495.4 4 1 1/6 2008-2040 09°24'N 150°46'W 0-145 1332.9 5 1 1/9 2005-2036 65°42'N 149°00'W 0-144 1114.9 6 1 1/10 2012-2044 04°00'N 147°21'W 0-140 1615.7 7 1 1/11 2004-2035 01°21'N 145°55'W 0-148 1746.9 8 1 1/12 2003-2042 01°35'S 144°32'W 0-136 2199.2 9 1 1/13 2006-2037 04°32'S 142°49'W 0-146 1530.4 10 1 1/14 2004-2038 67°41'S 141°05'W 0-140 1615.7 22 1 1/23 1622-1655 09°34'S 139°50'W 0-145 1991.9 2 " 1525-1855 " " 2023.7 3 " 2005-2040 " " 0-155 2104.9 4 2207-2238 " " 0-140 1711.4 5 1/24 0013-0048 " " 0-140 1711.4 5 1/24 0013-0048 " " 0-141 1887.6 7 " 0408-0438 " " 0-143 1787.0 8 " 0515-0649 " " 0-158 1716.6 9 " 0803-0332 " " 0-140 1528.0 10 " 1012-1042 " " 0-149 1568.6 11 " 1208-1245 " " 0-140 1559.6 30 1 1/27 2116-2151 09°12'S 139°17'W 0-141 1755.7 32 1 1/28 0313-0342 09°10'S 138°48'W 0-165 1300.0 34 1 " 2110-2140 09°10'S 136°50'W 0-146 1300.0 34 1 " 2110-2140 09°10'S 136°50'W 0-146 1688.4 41 1 1/31 0312-0342 10°14'S 139°34'W 0-146 1688.4 41 1 1/31 0312-0342 10°14'S 139°34'W 0-165 1158.6 47 1 " 2110-2141 11°16'S 139°34'W 0-161 1551.1	6 14 33 27 18 30 43
2 1 1/6 2012-2045 15°03'N 153°57'W 0-145 1899.8 3 1 1,7 2011-2042 12°13'N 152°12'W 0-155 1495.4 4 1 1/6 2008-2040 09°24'N 150°46'W 0-145 1332.9 5 1 1/9 2005-2036 65°42'N 149°00'W 0-144 1114.9 6 1 1/10 2012-2044 04°00'N 147°21'W 0-140 1615.7 7 1 1/11 2004-2035 01°21'N 145°55'W 0-148 1746.9 8 1 1/12 2003-2042 01°35'S 144°32'W 0-136 2199.2 9 1 1/13 2006-2037 04°32'S 142°49'W 0-146 1530.4 10 1 1/14 2004-2038 67°41'S 141°05'W 0-140 1615.7 22 1 1/23 1622-1655 09°34'S 139°50'W 0-145 1991.9 2 " 1525-1855 " " 2023.7 3 " 2005-2040 " " 0-155 2104.9 4 2207-2238 " " 0-140 1711.4 5 1/24 0013-0048 " " 0-140 1711.4 5 1/24 0013-0048 " " 0-141 1887.6 7 " 0408-0438 " " 0-143 1787.0 8 " 0515-0649 " " 0-158 1716.6 9 " 0803-0332 " " 0-140 1528.0 10 " 1012-1042 " " 0-149 1568.6 11 " 1208-1245 " " 0-140 1559.6 30 1 1/27 2116-2151 09°12'S 139°17'W 0-141 1755.7 32 1 1/28 0313-0342 09°10'S 138°48'W 0-165 1300.0 34 1 " 2110-2140 09°10'S 136°50'W 0-146 1300.0 34 1 " 2110-2140 09°10'S 136°50'W 0-146 1688.4 41 1 1/31 0312-0342 10°14'S 139°34'W 0-146 1688.4 41 1 1/31 0312-0342 10°14'S 139°34'W 0-165 1158.6 47 1 " 2110-2141 11°16'S 139°34'W 0-161 1551.1	6 14 33 27 18 30 43
3 1 1/T 2011-2042 12°13'N 152°12'W 0-155 1495.4 4 1 1/8 2008-2040 09°24'N 150°46'W 0-145 1332.9 5 1 1/9 2005-2030 66°42'N 149°00'W 0-144 1114.9 6 1 1/10 2012-2044 04°00'N 147°21'W 0-140 1615.7 7 1 1/11 2004-2035 01°21'N 145°55'W 0-148 1746.9 8 1 1/12 2003-2042 01°35'S 144°32'W 0-136 2199.2 9 1 1/13 2006-2037 04°32'S 142°49'W 0-146 1530.4 10 1 1/14 2004-2038 07°41'S 141°05'W 0-146 1530.4 10 1 1/14 2004-2038 07°34'S 139°50'W 0-149 191.9 2 1 1/23 1622-1655 09°34'S 139°50'W 0-149 190.4 <tr< td=""><td>14 33 27 18 30 43</td></tr<>	14 33 27 18 30 43
4 1 1/8 2008-2040 19°24'N 150°46'W 0-145 1332.9 5 1 1/9 2005-2030 66°42'N 149°00'W 0-144 1114.9 6 1 1/10 2012-2044 04°00'N 147°21'W 0-140 1615.7 7 1 1/11 2004-2035 01°21'N 145°55'W 0-148 1746.9 8 1 1/12 2003-2042 01°35'S 144°32'W 0-136 2199.2 9 1 1/13 2006-2037 04°32'S 142°49'W 0-146 1530.4 10 1 1/14 2004-2036 07°41'S 141°05'W 0-140 2186.5 22 1 1/23 1622-1655 09°34'S 139°50'W 0-145 1991.9 2 1 1/23 1622-1655 09°34'S 139°50'W 0-145 1991.9 2 1 1/255-1855 " " " 2023.7 3 2<	33 27 18 30 43
5 1 1/9 2005-2030 C6*42'N 149*00'W 0-144 1114.9 6 1 1/16 2012-2044 O4*00'N 147*21'W 0-140 1615.7 7 1 1/11 2004-2035 01*21'N 145*55'W 0-146 1746.9 8 1 1/12 2003-2042 01*35'S 144*32'W 0-146 1530.4 9 1 1/13 2006-2037 O4*32'S 142*49'W 0-146 1530.4 10 1 1/14 2004-2038 G7*41'S 141*05'W 0-140 2186.5 22 1 1/23 1622-1655 09*34'S 139*50'W 0-145 1991.9 2 1 1/23 1622-1655 09*34'S 139*50'W 0-145 1991.9 2 1 1/23 1622-1655 09*34'S 139*50'W 0-145 1991.9 2 1 1/23 1622-1655 09*34'S 139*50'W 0-145 1991.9	27 18 30 43
5 1 1/16 2012-2044 04°00'N 147°21'W 0-140 1615.7 7 1 1/11 2004-2035 01°21'N 145°55'W 0-148 1746.9 8 1 1/12 2003-2042 01°35'S 144°32'W 0-136 2199.2 9 1 1/13 2006-2037 04°32'S 142°49'W 0-146 1530.4 10 1 1/14 2004-2038 07°41'S 141°05'W 0-140 2186.5 22 1 1/23 1622-1655 09°34'S 139°50'W 0-145 1991.9 2 1 1/23 1622-1655 09°34'S 139°50'W 0-145 1991.9 2 1 1/23 1622-1655 09°34'S 139°50'W 0-145 1991.9 2 1 1/23 1622-1655 09°34'S 139°50'W 0-140 1104.9 3 2 207-2238 """"""""""""""""""""""""""""""""""""	30 43
7	43
\$ 1 1/12 2003-2042 01°35'S 144°32'W 0-136 2199.2 9 1 1/13 2006-2037 04°32'S 142°49'W 0-146 1530.4 10 1 1/14 2004-2038 67°41'S 141°05'W 0-140 2186.5 22 1 1/23 1622-1655 09°34'S 139°50'W 0-145 1991.9 2 " 1825-1855 " " " 2023.7 3 " 2005-2040 " " 0-158 2104.9 4 2207-2238 " " 0-140 1711.4 5 1/24 0013-0048 " " 2223.4 6 " 0210-0241 " " 0-140 1711.4 5 1/24 0013-0048 " " 0-141 1887.6 7 " 0408-0433 " 0-148 1787.0 8 " 0615-0649 " " 0-148 1787.0 9 " 0803-0332 " 0-146 1528.0 10 " 1012-1042 " " 0-149 1568.6 11 " 1208-1245 " " 0-140 1529.6 30 1 1/27 2116-2151 09°12'S 139°17'W 0-141 1755.7 32 1 1/28 0313-0342 09°12'S 138°48'W 0-160 1300.0 34 1 " 2110-2140 09°10'S 136°50'W 0-147 1750.6 36 1 1/29 0313-0343 09°10'S 136°50'W 0-145 1617.9 39 1 1/30 2109-2139 09°37'S 139°36'W 0-145 1688.4 41 1 1/31 0312-0342 10°14'S 139°36'W 0-154 1466.3 44 1 2/1 0313-0343 12°31'S 139°36'W 0-155 1158.6 47 1 " 2110-2141 11°16'S 139°34'W 0-165 1158.6	
9 1 1/13 2006-2037 04°32'S 142°49'W 0-146 1530.4 10 1 1/14 2004-2038 67°41'S 141°05'W 0-140 2186.5 22 1 1/23 1622-1655 09°34'S 139°50'W 0-145 1991.9 2	89
10	
22 1 1/23 1622-1655 09°34'S 139°50'W 0-145 1991.9 2 " 1825-1855 " " " 2023.7 3 " 2005-2040 " " 0-158 2104.9 4 " 2207-2238 " " 0-140 1711.4 5 1/24 0013-0048 " " 0-140 1711.4 5 1/24 0013-0048 " " 0-141 1887.6 7 " 0408-0433 " " 0-143 1787.0 8 " 0615-0649 " " 0-158 1716.8 9 " 0803-0832 " " 0-149 1568.6 10 " 1012-1042 " " 0-149 1568.6 11 " 1208-1245 " " 0-158 1986.8 12 1401-1431 " " 0-140 1559.6 30 1 1/27 2116-2151 09°12'S 138°48'W 0-140<	86
2	21
3	30
4 2207-2238 """ 0-140 1711.4 5 1/24 0013-0048 """ 2223.4 6 0210-0241 """ 0-141 1887.6 7 "" 0408-0438 """ 0-148 1787.0 8 "" 0615-0649 """ 0-158 1716.8 9 "" 0803-0832 """ 0-140 1528.0 10 "" 1012-1042 """ 0-149 1568.6 11 "" 1208-1245 """ 0-158 1986.8 12 "401-1431 """ 0-140 1559.6 30 1 1/27 2116-2151 09°12'S 139°17'W 0-141 1755.7 32 1 1/28 0313-0342 09°12'S 138°48'W 0-160 1300.0 34 1 "" 2110-2140 09°10'S 136°50'W 0-147 1750.6 36 1 1/29 0313-0343 09°10'S 136°18'W 0-145 1617.9 39 1 1/30 2109-2139 09°37'S 139°40'W 0-145 1688.4 41 1 1/31 0312-0342 10°14'S	43
5 1/24 0013-0048 " " 2223.4 6	64
6	63
T	60
8	50
9	24
10	23
11	18
12	22
30 1 1/27 2116-2151 09°12'S 139°17'W 0-141 1755.7 32 1 1/28 0313-0342 09°12'S 138°48'W 0-160 1300.0 34 1 " 2110-2140 09°10'S 136°50'W 0-147 1750.6 36 1 1/29 0313-0343 09°10'S 136°18'W 0-145 1617.9 39 1 1/30 2109-2139 09°37'S 139°40'W 0-145 1688.4 41 1 1/31 0312-0342 10°14'S 139°38'W " 1516.8 42 1 " 2112-2142 12°02'S 139°36'W 0-154 1466.3 44 1 2/1 0313-0343 12°31'S 139°34'W 0-165 1158.6 47 1 " 2110-2141 11°16'S 139°42'W 0-141 1551.1	21
32 1 1/28 0313-0342 09°12'S 138°48'W 0-160 1300.0 34 1 " 2110-2140 09°10'S 136°50'W 0-147 1750.6 36 1 1/29 0313-0343 09°10'S 136°18'W 0-145 1617.9 39 1 1/30 2109-2139 09°37'S 139°40'W 0-145 1688.4 41 1 1/31 0312-0342 10°14'S 139°38'W " 1516.8 42 1 " 2112-2142 12°02'S 139°36'W 0-154 1466.3 44 1 2/1 0313-0343 12°31'S 139°34'W 0-165 1158.6 47 1 " 2110-2141 11°16'S 139°42'W 0-141 1551.1	65
34 1 " 2110-2140 09°10'S 136°50'W 0-147 1750.6 36 1 1/29 0313-0343 09°10'S 136°18'W 0-145 1617.9 39 1 1/30 2109-2139 09°37'S 139°40'W 0-145 1688.4 41 1 1/31 0312-0342 10°14'S 139°38'W " 1516.8 42 1 " 2112-2142 12°02'S 139°36'W 0-154 1466.3 44 1 2/1 0313-0343 12°31'S 139°34'W 0-165 1158.6 47 1 " 2110-2141 11°16'S 139°42'W 0-141 1551.1	65
36 1 1/29 0313-0343 09°10'S 136°18'W 0-145 1617.9 39 1 1/30 2109-2139 09°37'S 139°40'W 0-145 1688.4 41 1 1/31 0312-0342 10°14'S 139°38'W " 1516.8 42 1 " 2112-2142 12°02'S 139°36'W 0-154 1466.3 44 1 2/1 0313-0343 12°31'S 139°34'W 0-165 1158.6 47 1 " 2110-2141 11°16'S 139°42'W 0-141 1551.1	26
39	35
41 1 1/31 0312-0342 10°14'S 139°38'W " 1516.8 42 1 " 2112-2142 12°02'S 139°36'W 0-154 1466.3 44 1 2/1 0313-0343 12°31'S 139°34'W 0-165 1158.6 47 1 " 2110-2141 11°16'S 139°42'W 0-141 1551.1	25
42 1 " 2112-2142 12°02'S 139°36'W 0-154 1466.3 44 1 2/1 0313-0343 12°31'S 139°34'W 0-165 1158.6 47 1 " 2110-2141 11°16'S 139°42'W 0-141 1551.1	58
44 1 2/1 0313-0343 12°31'S 139°34'W 0-165 1158.6 47 1 " 2110-2141 11°16'S 139°42'W 0-141 1551.1	15
47 1 " 2110-2141 11°16'S 139°42'W 0-141 1551.1	18
	51
	98
57 1 2/5 2118-2145 09°07'S 141°05'W " 1264.6	38
59 I 2/6 0319-0344 09°03'S 141°32'W 0-142 1384.6	41
60 1 " 2113-2143 09°13'S 143°02'W 0-140 1403.1	54
62 1 2/7 0315-0337 09°15'S 142°26'W 0-145 1468.9	27
64 1 " 2109-2133 09°13'S 140°41'W 0-167 1039.8	52
66 1 2/8 0318-0348 09°16'S 140°06'W 0-140 1511.9	35
70 1 2/9 2110-2137 07°35'S 139°40'W " 1164.9	103
71 1 2/10 0330-0359 06°52'S 139°40'W 0-141 1386.1	26
73 1 " 2113-2142 05°37'S 139°50'W 0-140 1363.7	33
75 1 2/11 0319-0347 06°21'5 139°38'W 0-141 1279.6	48
76 1 " 2120-2146 08°30'S 139°40'W 0-140 957.7	100
78 1 2/12 0312-0341 09°03'S 139°45'W " 1199.9	
83 1 2/15 2002-2032 08°23'S 140°38'W 0-149 930.7	07
84 1 2/16 2005-2035 05°19'S 142°25'W 0-146 1137.2	69 70
85 1 2/17 2001-2031 02°10'S 144°08'W 0-149 1143.1	

 $[\]frac{1}{2}$ Stations 10 through 83 are on +9 ZT; others are on +10 ZT.

^{2/} Jellies >2 cm. in length and other organisms >5 cm. in length are not included.

Table I6. -- Zooplankton station data and sample volumes, Hugh M. Smith cruise 43 (cont'd)

Sta-	Sam-	Date,	T. 1/	Posi	Position		Water strained.	Volume, cc./1000 m.3 2/
tion	tion ple 1958		Time='	Latitude	Longitude	m.	m. 3	
86	1	2/18	2007-2042	01°22'N	145°59'W	0-103	1172.0	04
87	1	2/19	2002-2032	04°40'N	147°23'W	0-101	1351.6	70
88	1	2/20	2010-2039	07°49'N	148°37'W	0-142	1506.1	27
89	1	2/21	2009-2033	11°00'N	150°42'W	0-1:0	1301.0	30
90	1	2/22	2005-2040	14°29'N	152°31'W	H	1965.1	19
91	1	2/23	2007-2037	17°25'N	154°52'W	tr	1051.4	9
92	1	2/24	2005-2034	20°03'N	157°06'W	0-147	1278.4	IS

 $[\]frac{1}{2}$ Stations 10 through S3 are on ÷9 ZT; others are on ÷10 ZT.

 $[\]frac{2}{2}$ Jellies >2 cm. in length and other organisms >5 cm. in length are not included.

Table 17. -- Zooplankton station data and sample volumes, Charles H. Gilbert cruise 38

Sta -	Sam-	Date,	Time,	Posi	tion	Depth,	Water	Volume, 1
tion	ple	1958	+10 ZT	Latitude	Langitudo	m.	strained,	cc./1000 m. 3 1/
	Pic	1/30	110 23 1	Latitude	Longitude	•	m.3	
1	1	2/9	2023-2053	19°05'N	156°44'W	0-140	1722.5	58
2	l	2/10	2020-2051	16°26'N	155°19'W	0 - 1 10	1485.4	10
3	1	2/13	2005-2036	08°15'N	151°32'W	11	1836.9	5 6
4	1	2/14	2005-2036	05°31'N	150°06'W	ri .	1945.2	32
6	1	2/15	2012 - 2041	04°27'N	149°56'W	11	1444.9	44
8	1	2/16	2009-2036	03°28'N	149°58'W	11	1648.3	40
10	1	2/17	2019-2049	02°31'N	150°08'W	0-142	1716.4	38
12	1	2/18	2005-2036	01°30'N	150°15'W	0-140	1902.2	29
14	1	2/19	2003-2033	00°35'N	150°10'W	0-115	915.1	36
16	1	2/20	2005-2035	00°14'S	150°04'W	0-140	1702.5	62
18	1	2/21	2019-2052	01°10'S	149°44'W	0-140	1700.8	29
19	1	2/22	2002-2032	03°05'S	147°40'W	11	2045.3	29
20	î	2/23	2000-2031	04°59'S	145°02'W	11	2196.6	35
21	I	2/24	2006-2036	07°12'S	142°10'W	11	2084.7	43
34A	1	3/6	0706-0736	09°34'S	139°50'W	11	1885.5	11
В	1	11	0903-0933	07 34 3	139 30 W	0-141	1476.7	13
C	1	11	1105-1137	11	11	0-141	1896.6	
D	1	11	1308-1338	11	11			14
E	1			51	11	11	1938.8	9
F		11	1508 - 1536		11	0.142	1486.8	12
	1	11	1707 - 1737	11	11	0-142	1949.7	16
G	1	11	1906 - 1936	11	11	11	1902.2	24
H	1	11	2110-2140	11	71	0-140	1624.9	34
I	1	11	2306 - 2337	11		0-142	1737.6	40
J	1	3/7	0105-0135	11	17	0-140	1907.0	38
K	1	£1	0303-0334		11	0-142	1884.9	53
L	1	11	0504-0534	11	11	0-140	1703.9	34
46	1	3/26	2104-2134	09°11'S	138°06'W	11	1416.2	41
48	1	3/27	0305-0335	09°09'S	137°34'W	0-142	1647.2	55
49	1	11	2004-2035	09°11'S	136°15'W	11	1703.6	36
51	1	3/28	0204-0234	09°07'S	136°56'W	0-140	1776.7	47
53	1	11	2022-2051	09°09 ' S	138°53'W	11	1394.2	79
55	1	3/29	0203-0232	09°08'S	139°27'W	11	1338.6	73
57	1	11	2004-2034	07°32'S	139°46'W	0-142	1275.6	60
59	1	3/30	0205-0236	06°57'S	139°44'W	11	1363.8	35
60	1	11	2002 - 2032	05°44'S	139°40'W	0-140	1644.4	38
62	1	3/31	0207-0237	06°20 ' S	139°39'W	11	1505.8	47
64	1	H	2003-2033	08°10'S	139°44'W	0-142	1475.9	102
66	1	4/1	0206-0236	08°38'S	139°57'W	51	1456.4	61
69	1	4/3	2004-2034	09°08'S	141°14'W	0-140	1543.7	45
71	1	4/4	0209-0239	09°07'S	141°52'W	11	1751.3	43
72	1	H	2002-2033	09°05'S	142°58'W	0-142	1885.5	35
74	1	4/5	0204-0234	09°04'S	142°28'W	11	1657.8	52
75	1	11	2003-2032	09°09'S	140°28'W	0-140	1212.8	48
77	1	4/6	0209-0239	09°12'S	139°57'W	11	1333.3	72
78	1	11	2007 - 2037	10°52'S	139°45'W	0-142	1407.8	38
80	1	4/7	0204-0235	11°28'S	139°48'W	0-140	1627.7	37
81	1	H	2003-2033	12°32'S	139°43'W	11	1546.5	47
83	1	4/8	0205-0235	12°00'S	139°41'W	11	1921.8	42
84	1	11	2000 - 2030	10°02'S	139°44'W	0-142	1406.7	70
86	1	4/9	0202-0232	09°24'S	139°51'W		1536.7	51

 $[\]frac{1}{2}$ Jellies >2 cm. in length and other organisms >5 cm. in length are not included.

Table 17. --Zooplankton station data and sample volumes, Charles H. Gilbert cruise 38 (cont'd)

	Sam -	Date,	Time,	Pos	ition	Depth,	Water strained,	Volume, 1/	
tion	ple	1958	+10 ZT	Latitude	Longitude	m.	m.3	cc./1000 m. 3 1/	
93A	1	4/17	1211-1241	09°34'S	139°50'W	0-140	1608.2	27	
В	1	11	1403-1433	11	11	11	1629.9	23	
С	1	11	1602-1632	11	11	11	1512.7	32	
D	1	11	1803-1833	11	11	0-142	1847.0	51	
E	1	11	2002-2032	11	11	0-140	1630.8	59	
F	1	11	2206-2236	11	11	11	1719.8	59	
G	1	4/18	0002-0033	t 1	11	0-142	1697.4	70	
Н	1	11	0202-0232	11	11	11	1668.4	49	
I	1	11	0403-0433	11	3.1	2/	1478.7	45	
J	1	11	0602-0632	11	11	0-140	1478.4	31	
K	1	11	0803-0834	11	11	0-142	1696.3	35	
L	1	11	1002-1032	11	11	0-140	1573.3	30	
98	1	4/21	2008-2037	08°02'S	140°50'W	2/	1350.4	50	
99	1	4/22	2001-2031	05°21'S	142°26'W	0-142	1582.5	26	
100	1	4/23	2003-2033	02°34'S	144°12'W	0-140	1932.6	50	
101	1	4/24	2000 - 2029	00°22¹N	145°57'W	11	1935.7	67	
102	1	4/25	2003-2033	03°15¹N	147°40'W	11	1733.4	52	
103	1	4/26	2000 - 2030	06°02'N	149°07'W	0-138	1537.8	56	
104	1	4/28	2004-2034	11°44'N	152°31'W	0-140	1652.2	32	
105	1	4/29	2002-2032	14°40'N	154°09'W	11	1503.5	18	
106	1	4/30	2006-2036	17°42'N	155°40'W	†1	1560.4	17	

 $[\]frac{1}{2}$ Jellies >2 cm. in length and other organisms >5 cm. in length are not included.

 $[\]frac{2}{2}$ Depth of tow uncertain due to failure of metering apparatus.

Table 18 .-- Zooplankton station data and sample volumes, Hugh M. Smith cruise 45

		-			- ' • '	D	Water	Volume,
Sta -	Sam-	Date,	Time 1/	1	sition	Depth,	strained,	cc./1000 m.3 4/
tion	ple	1958		Latitude	Longitude	m.	m. 3	cc./1000 m. =
1	1	3/29	2019-2045	18°29'N	155°22'W	0-135	1388.9	13
2	î	3/30	2014-2044	16°12'N	153°04'W	0-132	1545.8	12
3	1	3/31	2008-2035	14°14'N	151°00'W	0-144	1231.3	26
4	1	4/1	2010-2038	12°11'N	148°46'W	0-132	1348.5	23
5	1	4/2	2016-2041	10°08'N	146°29'W	0-127	1077.6	38
6	1	4/3	2013-2039	08°05'N	144°11'W	0-140	1319.8	42
7	1	4/4	2108-2138	06°08'N	141°42'W	0-130	1458.1	47
78	1	5/15	2004-2030	09°08'S	138°10'W	0-140	1392.8	19
79	1	5/16	0317-0346	09°12'S	137°22'W	0-161	1611.1	20
82	1	11	2000-2028	09°10'S	136°10'W	0-140	1432.8	37
83	1	5/17	0320-0347	09°13'S	137°02'W	0-139	1321.9	26
84	1	11	1959-2029	09°12'S	139°07'W	0-125	1601.3	34
87	1	5/19	2000-2029	09°12'S	141°22'W	0-140	1578.1	62
88	1	5/20	0313-0343	09°12'S	142°02'W	0-137	1357.3	31
90	1	11	1955-2026	09°12'S	143°08'W	0-140	1536.0	30
91	1	5/21	0309-0338	09°14'S	142°20'W	11	1592.1	34
94	1	11	2002-2031	09°12'S	140°36'W	0-137	1359.1	80
97	1	5/23	2001-2030	07°39'S	139°45'W	0-140	1421.6	25
98	1	5/23	0314-0343	06°54'S	139°41'W	0-1-0	1426.5	21
101	1	J/ 24	1958-2028	05°38'S	139°40'W	0-138	1420.3	40
101	1	5/25	0310-0344	06°24'S	139°38'W	0-138	1759.2	24
					•	0-140	1926.3	24
105	1	II / 2.7	1959-2034	08°25'S	139°42'W			
107	1	5/27	2000-2028	10°55'S	139°40'W	0-139	1301.2	66
108	1	5/28	0312-0339	11°30'S	139°39'W	0-144	2165.0	15
110	1	5/20	2001-2040	12°41'S	139°39'W	0-133	2347.5	21
111	1	5/29	0306-0336	11°58'S	139°40'W	0-124	1459.1	23
113	1	11 .	1953-2025	10°11'S	139°34'W	0-140	1928.4	76
114	1	5/30	0315-0351	09°25'S	139°34'W	0-146	944.9	73
120	1	6/8	1522 - 1552	09°34 ' S	139°50'W	0-122	937.5	38
	2			11		112-230	606.7	14
121	1	(1)	1710-1739	11	11	0-125	797.5	49
	2	11			11	96-239	445.0	22
122	1	11	1914-1941	11		0-126	845.2	88
	2	11	11 11	11	11	112 -238	1041.1	7
123	1	11	2105 -2133	11	11	0-126	941.4	87
	2	11	11 11	11	11	71-238	1003.0	6
124	1	F1	2313-2347	11	11	0-137	865.6	128
100	2	11	11 11	11	11	103-240	394.6	19
125	1	6/9	0110-0144	11	11	0-137	852.6	117
10/	2	11	11 ? 2/	11	11	70-240	1482.7	12
126	1	11	0308-0335	11		0-121	794.0	106
3.05	2	11		11		107-229	598.8	9
127	1	11	0510-0539	11	11	0-126	817.8	126
100	2	11	11 11	11	11	103-238	681.1	15
128	1	11	0711-0737	11	(1)	0-125	794.3	112
100	2	11	11 11	11	11	94-245	447.1	12
129	1	11	0910-0937	11	11	0-126	718.5	106
1.0.0	2	11	11 11	11	11	76-238	939.8	14
130	1	11	1108-1149	11	11	0-150	855.4	63
	2	Stations	11 11	11	11	71-262	71.33/	196

^{1/} Stations 7 through 148 are on +9 ZT; others are on +10 ZT.

^{2/} Messenger time was not recorded.
3/ Flowmeter reading was extremely low.
4/ Jellies >2 cm. in length and other organisms >5 cm. in length are not included.

Table 18. -- Zooplankton station cata and sample volumes, Hugh M. Smith cruise 45 (cont'd)

Sta-	Sam-	Date,	Time 1/	Posi	tion	Depth,	Water	Volume,	
tion	ple	1958	958 Latitude Lor		Longitude	m. straine m. 3		cc./1000 m. 34/	
131	1	6/9	1306-1333	09°34'S	139°50'W	0-123	702.0	32	
	2	11	11 11	11	†I	116-239	920.6	15	
134	1	6/12	2000-2030	08°33 ' S	139°34'W	0-138	1623.7	20	
135	1	6/13	2002-2038	05°20'S	139°16'W	0-140	2328.5	15	
139	1	6/14	1958-2027	02°46'S	139°42'W	0-138	1411 0	200	
144	1	6/15	2002-2027	01°02'N	141°02'W	0-140	1211.0	76	
148	1	6/16	2002-2038	04°00'N	142°59'W	0-137	1322.6	159	
151	1	6/17	2010-2040	06°48'N	144°40'W	0-134	1832.9	62	
155	1	6/18	2009-2039	09°13'N	146°43'W	0-140	1534.2	64	
156	1	6/19	2010-2043	12°02'N	149°03'W	0-144	1969.8	26	
157	1	6/20	2011-2043	14°42'N	151°11'W	0-117	1958.6	25	
158	1	6/21	2010-2043	17°14'N	153°40'W	0-134	1950.9	18	
159	1	6/22	2009-2045	19°36'N	156°26'W	0-140	2176.9	22	

 $[\]frac{1}{2}$ Stations 7 through 148 are on +9 ZT; others are on +10 ZT.

Table 19. -- Common and scientific names of fish caught

Yellowfin tuna	Neothunnus macropterus (Temminck and Schlegel)
Bigeye tuna	Parathunnus sibi (Temminck and Schlegel)
2 ,	
Skipjack	Katsuwonus pelamis (Linnaeus)
Little tuna	Euthynnus yaito Kishinouye
Dogtooth tuna	Gymnosarda nuda (Günther)
Dolphin	Coryphaena hippurus Linnaeus
Shortnosed spearfish	Tetrapturus angustirostris Tanaka
Black marlin	Istiompax marlina (Jordan and Hill)
Blue marlin	Makaira ampla (Poey)
Striped marlin	Makaira audax (Philippi)
Wahoo	Acanthocybium solandri (Cuvier and Valenciennes)
Whitetip shark	Pterolamiops longimanus (Poey)
Silky shark	Eulamia floridanus (Bigelow, Schroeder, and Springer)
Great blue shark	Prionace glauca (Linnaeus)
Bigeye thresher shark	Alopias superciliosus (Lowe)
Bonito shark	Isurus glaucus Müller and Henle
Hammerhead shark	Sphyrna lewini (Griffith)
Puffer	Lagocephalus (Linnaeus)
Marquesan sardine	Harengula vittata (Cuvier and Valenciennes)
Red snapper	Lutjanus bohar (Forskål)
Green snapper	Aprion virescens Cuvier and Valenciennes
Jack	Caranx ignobilis (Forskål)
Jack	Caranx lugubris Poey
Jack	Caranx melampygus Cuvier and Valenciennes
Barracuda	Sphyraena nigripinnis Temminck and Schlegel
Spiny puffer	Diodon sp.
Rainbow runner	Elagatis bipinnulatus (Quoy and Gaimard)

^{4/} Jellies >2 cm. in length and other organisms >5 cm. in length are not included.

Table 20. -- Surface troll catch and related data, Charles H. Gilbert cruise 35

Date,	Time,	Pos	ition	Species	Num-	Average
1957	LT	Latitude	Longitude	Species	ber <u>1</u> /	length, cm.
10/3	0715	19°47'N	156°19'W	Dolphin	1	112.5
10/4	-	-	-	Dolphin	1	53.1
10/6	1130	10°12'N	150°36'W	Dolphin	1	-
10/8	1730	03°55'N	146°41'W	Skipjack	1	70.7
10/11	1630	05°09'S	142°22'W	Skipjack	2	78.8
10/12	1730	08°04'S	140°43'W	Wahoo	1	133.3
10/14	0545	08°58 'S	140°10'W	Wahoo	3	130.5
10/14	0600	08°58'S	140°02'W	Little tuna	1	68.3
10/14	0620	08 °46'S	140°15'W	Yellowfin	2	90.4
10/14	0940	08°40 ' S	140°35'W	Little tuna	I	55. I
10/14	0940	08°40¹S	140°35'W	Yellowfin	2	82.4
10/14	0940	08°40'S	140°35'W	Wahoo	3	137.5
10/14	0948	08°39'S	140°35'W	Green snapper	5	75.4
10/14	1602	08°00'S	140°44'W	Wahoo	1	148.2
10/15	0510	07°58'S	140°41'W	Yellowfin	8	95.5
10/15	0515	07°58'S	140°40'W	Little tuna	7	66.8
10/15	0607	07°52'S	140°36'W	Wahoo	1	136.4
10/15	0620	07°52'S	140°34'W	Little tuna	2	60.8
10/15	0630	07°50'S	140°33'W	Yellowfin	1	80.7
10/15	1345	07°58'S	139°49'W	Yellowfin	1	60.1
10/17	1000	09°25'S	138°56 ^t W	Jack	2	78.5
10/17	1000	09°25'S	138°56'W	Red snapper	I	80.0
10/17	1010	09°26 ' S	138°54'W	Jack	4	66.5
10/17	1025	09°30'S	138°52'W	Green snapper	1	80.7
10/17	1030	09°30'S	138°52'W	Yellowfin	I	88.1
10/18	0655	10°02'S	138°50'W	Skipjack	1	47.0
10/19	1002	10°04'S	139°09'W	Wahoo	1	131.1
10/24	0940	09°07'S	139°20'W	Dolphin	I	96.2
10/24	1530	09°08'S	138°38'W	Dolphin	1	96.9
10/26	1302	09°14'S	137°53'W	Yellowfin	I	117.0
10/27	0630	09°28'S	139°38¹W	Wahoo	I	103.6
10/29	1045	11°21'S	140°25'W	Dolphin	1	-
11/1	0610	09°08'S	139°38'W	Dolphin	1	93.6
11/1	1400	08°06'S	139°36'W	Dolphin	2	92.2
11/1	1405	08°06'S	139°36'W	Yellowfin	1	88.9
11/1	1405	08°06'S	139°36'W	Wahoo	1	148.5
11/2	0610	06°45'S	139°28'W	Dolphin	1	101.9
11/3	0700	06°54'S	139°50'W	Skipjack	1	78.3
11/3	1700	08°00'S	139°36'W	Skipjack	1	51.6
11/4	1045	09°14'S	140°18'W	Spiny puffer	1	-

 $[\]frac{1}{2}$ Fish of the same species caught within a 1-hour interval were combined in a single number.

Table 20. -- Surface troll catch and related data, Charles H. Gilbert cruise 35 (cont'd)

Date,	Time,	Posi	tion		Num-	Average
1957	LT	Latitude	Longitude	Species	ber1/	length,
1/31		2001000				cm.
11/5	1625	09°12 ' S	143°20'W	Wahoo	1	80.2
11/19	0630	15°56'S	147°48'W	Yellowfin	1	60.4
11/24	0850	08°39'S	140°36'W	Green snapper	1	71.0
11/24	0855	08°34'S	140°40'W	Yellowfin	1	119.5
11/25	0545	07°54'S	140°40'W	Yellowfin	1	111.0
11/25	0835	07°48'S	140°19'W	Little tuna	1	61.9
11/25	0840	07°48'S	140°42'W	Jack	1	54.0
11/25	0905	07°48'S	140°16'W	Green snapper	2	71.9
11/25	1500	08°35'S	139°38'W	Green snapper	2	71.9
11/25	1505	08°36'S	139°38'W	Little tuna	1	45.7
-			·			
11/25	1507	08°36'S	139°38'W	Dogtooth tuna	1	78.5
11/27	0850	09°18'S	139°04'W	Dogtooth tuna	2	107.7
11/27	0850	09°18'S	139°04'W	Red snapper	6	_
11/27	0852	09°18'S	139°04'W	Jack	7	_
11/27	0900	09°20'S	139°02'W	Green snapper	2	_
11/27	0923	09°22'S	139°00'W	Jack	2	_
11/27	0923	09°22'S	139°00'W	Jack	1	_
11/27	0930	09°22'S	138*59'W	Little tuna	1	_
11/27	0947	09°23¹S	138°58'W	Wahoo	1	_
11/27	0950	09°23'S	138°58'W	Rainbow runner	1	-
11/27	1430	09°50'S	138°55¹W	Dolphin	1	86.0
11/29	1210	09°52'S	139°06'W	Wahoo	1	129.0
11/29	1715	08°58'S	140°05'W	Yellowfin	2	64.3
12/4	0610	07°58'S	140°44'W	Wahoo	3	130.4
12/4	0654	07°56'S	140°42'W	Yellowfin	3	80.6
12/4 $12/4$	0654	07°56'S	140°42'W	Little tuna	6	56.0
12/4	0730	03°52'N	147°15'W		1	59.8
12/8	1335	04°46'N	147 *48 W	Skipjack Skipjack	3	60.0
12/8	1525	14°06'N	152°21'W	Skipjack Wahoo	1	134.0
12/11	0930	19°14'N	156°12'W	Yellowfin	2	61.1
	0730	-/ 1	130 12 11	I GIIOMIII	4	01.1

 $[\]frac{1}{r}$ Fish of the same species caught within a I-hour interval were combined in a single number.

Table 21. -- Surface troll catch and related data, Hugh M. Smith cruise 43

Date,	Time,	Posi		Species	Num-	Average length,
1958	LT	Latitude	Longitude		ber 1/	cm.
1/7	1130	13°14'N	152°42'W	Dolphin	1	85.6
1/7	1800	12°26'N	152°18'W	Dolphin	1	96.8
1/13	1425	03°57'S	143°11'W	Yellowfin	î	,0.0
1/15	0630	05 51 5		Wahoo	2	142.7
1/18	0700	08°54'S	140°17'W	Wahoo	1	137.2
1/18	0940	08°41'S	140°36'W	Wahoo	i	117.8
1/19	1015	07°48'S	140°13'W	Wahoo	1	160.8
1/20	0625	08°10'S	139°33'W	Yellowfin	î	73.2
1/21	1212	09°25'S	138°54'W	Jack	1	-
1/21	1222	09°27'S	138°53'W	Jack	4	_
1/21	1000	.,		5 4 6 1 1	•	
1/21	1235	09°28'S	138°52'W	Red snapper	3	-
1/21	1300	09°29'S	138°52'W	Great blue shark	1	-
1/22	-	-	-	Wahoo	1	157.5
1/23	1405	09°48'S	139°36'W	Yellowfin	3	57.3
1/24	1645	09°25'S	140°07'W	Dolphin	1	105.5
1/25	0640	09°18'S	140°05'W	Yellowfin	2	72.9
1/27	1600	09°05'S	139°46'W	Yellowfin	3	52.2
2/11	1620	08°00'S	139°34'W	Yellowfin	1	73.6
2/11	1830	08°17'S	139°40'W	Wahoo	1	-
2/15	1515	08°59'S	140°10'W	Dolphin	1	108.0
2/22	0640	12°38'N	151°27'W	Dolphin	1	92.2
2/23	0955	16°14'N	153°48'W	Dolphin	1	78.1
2/23	1220	16°33'N	154°03'W	Dolphin	1	86.0
2/23	1715	17°02'N	154°28'W	Dolphin	1	72.5

<sup>1/
-</sup> Fish of the same species caught within a 1-hour interval were combined in a single number.

Table 22. -- Surface troll catch and related data, Charles H. Gilbert cruise 38

Date,	Time,	1 05.	ition	Species	Num-	Average
1958	LT	Latitude	Longitude	Species	ber <u>1</u> /	length, cm.
2/10	0840	17°46'N	155°58'W	Dolphin	2	107.8
2/10	1950	17°38'N	155°54'W	Dolphin	1	79.1
2/11	1505	14°26'N	154 °21' W	Dolphin	1	80.8
2/14	1730	05°51'N	150°05'W	Puffer	1	-
2/25	0845	08°19'S	140°44'W	Wahoo	1	96.5
2/25	1000	08°27'S	140°38'W	Dolphin	1	123.2
2/25	1435	08*55'S	140°16'W	Yellowfin	1	80.8
2/25	1450	08°57'S	140°14'W	Little tuna	1	59.9
2/25	1450	08°57'S	140°14'W	Rainbow runner	1	55.7
2/27	0625	08°58'S	140°11'W	Yellowfin	1	74.0
2/27	0905	08°48'S	140°18'W	Yellowfin	2	75.8
2/27	1620	08°01'S	140°44¹W	Little tuna	1	79.4
2/27	1620	08°01'S	140°44'W	Rainbow runner	1	97.5
2/28	0625	07°55'S	140°40'W	Yellowfin	1	127.1
2/28	1215	07°47'S	140°08'W	Yellowfin	2	77.8
2/28	1642	08°04'S	139°38'W	Yellowfin	1	81.8
2/28	1642	08°04'S	139°38'W	Little tuna	2	56.9
3/1	0530	08°06'S	139°38'W	Wahoo	1	113.0
3/1	1340	08°52'S	139°25'W	Skipjack	2	49.0
3/2	1212	09°29'S	138°53'W	Green snapper	4	-
3/2	12 12	09°29'S	138°53'W	Jack	3	-
3/2	1216	09°29'S	138°53'W	Red snapper	1	-
3/2	1550	09°48'S	138°50'W	Yellowfin	2	68.8
3/26	1000	09°11'S	139°13'W	Barracuda	1	103.4
4/3	0920	09°09'S	140°14'W	Barracuda	1	87.5
4/3	1620	09°10'S	140°51'W	Barracuda	1 1	107.7
4/7 4/9	1445	12°48'S	139°46'W	Barracuda	1	91.5
4/11	0705 0525	08°50'S 08°58'S	140°03'W 140°10'W	Dolphin Yellowfin	1	96.0 74.4
4/11	0942	08°40'S	140 10 W	Green snapper	2	75.2
4/11	1005	08°38'S	140°35'W	Dogtooth tuna	1	111.2
4/11	1720	08°05'S	140°42'W	Little tuna	2	56.2
4/12	0520	07°57'S	140°41'W	Yellowfin	2	82.2
4/12	0525	07°57'S	140°41'W	Wahoo	2	135.6
4/12	0600	07°53'S	140°38'W	Little tuna	1	79.5
4/12	1428	07°55'S	139°59'W	Wahoo	1	117.3
4/12	1428	07°55'S	139°59'W	Little tuna	1	-
4/14	0950	09°25'S	139°04'W	Wahoo	1	143.4
4/14	1455	09°48'S	138°50'W	Wahoo	2	126.2
4/14	1627	09°53'S	138°58'W	Skipjack	1	50.7
4/16	1105	10°02'S	139°07'W	Yellowfin	3	91.4
4/16	1115	10°00'S	139°07'W	Wahoo	3	128.5
4/19	0515	09°20'S	140°04'W	Wahoo	3	126.6
4/19	1025	09°07'S	140°04'W	Dolphin	1	110.7
4/22	1425	05°58'S	142°02'W	Dolphin	2	75.8
4/24	1745	00°06'N	145°47'W	Skipjack	2	47.0

 $[\]frac{1}{r}$ Fish of the same species caught within a 1-hour interval were combined in a single number.

Table 23. -- Surface troll catch and related data, Hugh M. Smith cruise 45

Date,	Time,	Posit		Species	Num-	Average length,
1958	LT	Latitude	Longitude		ber <u>1</u> /	cm.
3/30	1405	16°45'N	153°41'W	Dolphin	1	116.0
3/30	1730	16°24'N	153°19'W	Dolphin	1	94.2
4/5	1445	04°39'N	140°01'W	Skipjack	1	70.2
4/29	1430	06°53'S	144°19'W	Wahoo	1	138.0
5/15	1500	09°08'S	138°40'W	Skipjack	1	50.8
5/19	1750	09°12'S	141°06'W	Yellowfin	2	54.8
5/21	0750	09°15'S	141°53'W	Yellowfin	2	60.6
5/21	1655	09°13'S	140°54'W	Yellowfin	2	60.2
5/24	0650	06°33'S	139°38'W	Skipjack	1	74.9
5/25	1700	08°02'S	139°40'W	Wahoo	1	140.8
5/25	1702	08°02'S	139°40'W	Yellowfin	1	79.0
5/28	0815	11°57'S	139°41'W	Skipjack	2	49.5
5/28	1600	12°45'S	139°40'W	Skipjack	1	46.7
5/29	1735	10°26'5	139°36'W	Yellowfin	1	88.0
6/1	0730	08°56¹S	140°16'W	Yellowfin	2	74.5
6/5	1200	09°27'S	138°54'W	Jack	2	107.2
6/6	1040	09°53'S	139°09'W	Wahoo	1	143.7
6/6	1200	09°45'S	139°10'W	Wahoo	1	145.5
6/7	0718	09°57'S	138°50'W	Wahoo	1	147.7
6/12	1700	08°47'S	139°49'W	Dolphin	1	80.4
6/21	1000	16°19'N	152°25'W	Wahoo	1	111.5

 $[\]frac{1}{2}$ Fish of the same species caught within a 1-hour interval were combined in a single number.

Table 24.--Longline station data and catch per 100 hooks, Charles H. Gilbert cruise 38

Q:	Date,	Noon p	osition	Number of	Number of	Catch		
Station	1958	Latitude	Longitude	baskets	hooks	Yellowfin	Bigeye	Skipjack
5	2/15	04°44'N	150°05'W	44	479	pun.	0.4	-
7	2/16	03°52'N	150°00'W	44	480	0.2	-	-
9	2/17	02°57'N	150°17'W	44	479	1.7	0.2	0.4
11	2/18	01°53'N	150°20'W	44	480	1.0	0.2	0.2
13	2/19	00°53'N	150°19'W	44	478	0.4	0.8	0.2
15	2/20	00°11'N	150°02'W	44	480	0.4	0.4	-
17	2/21	00°45'S	150°12'W	44	479	0.2	0.2	-

Table 25.--Longline catch record in numbers, length, and sex of fish, Charles H. Gilbert cruise 38

Station		Yellowfin 1/	<u> </u>	Bigeye 1/		Skipjack	Marlin	Shark
Station	No.	Length and sex $\frac{2}{}$	No.	Length and sex $\frac{2}{}$	No.	Length and sex—	Waitin	Shark
5	_	_	2	121.9F, 116.4	-	-	1	2
7	1	131.4	_	_		-	1	5
9	8	131.8, 132.0,	1	110.6F	$2^{3/}$	66.4M	-	1
		119.9F, 124.2M,						
		126.6F, 124.9,						
		129.7M, 140.2						
11	5	136.7F, 141.7M,	1	149.8M	1	71.6F	2	3
		127.0F, 135.8M,						
		142.2						
13	2	145.1M, 150.2M	4 <u>3</u> /	142.3F, 138.6F,	1	76.8F	1	1
				126.4M				
15	2	138.3M, 153.9M	2	168.9M, 162.3M	_	-	••	4
17	1	138.7	1	169.1M	-	-	-	3

 $[\]frac{1}{2}$ Those fish for which no sex data recorded were tagged and released.

^{2/} Fork length in centimeters; M = male, F = female.

This number includes one shark damaged specimen which was not measured.

Table 26 . -- Summary of pole-and-line fishing, Charles H. Gilbert cruise 35

Date,	Time,	Pos	ition	Number	Number of	Number caught	Amount of bait,
1957	LT	Latitude	Longitude	passes	minutes chummed	and species 1/	buckets
10/14	0650	08°53'S	140°17'W	2	15	0 YF	1.0
10/14	1333	08°15'S	140°37'W	2	4	0 ?	. 5
10/14	1531	08°05'S	140°41'W	2	4	0 ?	. 5
10/16	0625	08°08'S	139°36¹W	2	9	0 DO	. 5
10/16	1328	08°51'S	139°20'W	2	5	0 ?	1.0
10/16	1354	08°53¹S	139°23'W	2	9	0 ?	-
10/17	1210	09°39¹S	138°49'W	2	4	0 ?	1.0
10/17	1240	09°42 ' S	138°47'W	1	1	0 ?	-
10/18	0659	10°02'S	138°50'W	2	26	120 SJ	8.0
10/18	1354	10°23 ' S	138°37'W	3	6	0 ?	1.0
10/19	0702	10°18¹S	138°53¹W	2	8	0 ?	4.0
10/19	0726	10°16'S	138°56'W	2	10	42 SJ	7.0
10/19	0837	10°13'S	138°59'W	1	1	0 ?	. 5
10/19	1012	10°03¹S	139°09'W	2	2	0 ?	1.0
10/19	1042	10°01'S	139°09'W	1	6	0 ?	-
10/19	1055	09°59'S	139°11'W	1	2	0 ?	-
10/20	1427	09°27'S	140°10'W	2	5	0 YF and SJ	2.0
10/26	0757	09°13'S	137°11'W	1	2	0 SJ	1.0
10/26	1300	09°13 ' S	137°50'W	1	2	0 YF	. 5
10/27	0921	09°46'S	139°38'W	2	8	0 YF and SJ	2.0
10/27	0946	09°50'S	139°34'W	7	26	43 SJ, 5 YF	16.5
10/27	1314	10°02'S	139°34'W	1	1	0 ?	1.0
10/27	1441	10°15'S	139°34'W	1	I	0 ?	1.0
11/3	0719	06°56'S	139°53'W	1	2	0 SJ	1.0
11/3	0807	07°00'S	139°57'W	2	6	0 SJ	2.0
11/3	0854	07°01'S	139°56'W	1	2	0 SJ	1.0
11/3	1244	07°31'S	139°52'W	1	30	182 SJ	9.0
11/4	0928	09°13'S	140°09'W	4	11	0 ?	1.0
11/4	1312	09°13'S	140°34'W	2	9	0 ?	2.0
11/4	1538	09°13'S	140°43'W	4	19	158 SJ	11.0
11/6	1210	09°15'S	141°21'W	4	22	75 SJ, 4 YF	6.5
11/10	0907	14°20'S	145°58'W	7	18	0 YF	10.0
11/10	1017	14°20'S	146°02'W	1	1	0 ?	. 5
11/10	1034	14°23'S	146°04'W	2	7	0 ?	3.0
11/10	1145	14°29'S	146°05'W	I	18	144 YF	14.0
11/11	0625	14°33'S	146°07'W	2	9	4 SJ	1.0
11/12	1425	15°04'S	148°00'W	1	2	0 ?	1.0
11/12	1602	14°57'S	147°32'W	1	2	0 ?	. 5
11/12	1628	14°56'S	147°38'W	5	26	415 SJ	18.0
11/19	0929	15°37'S	147°25'W	11	28	209 SJ	15.0

 $[\]frac{1}{2}$ SJ = skipjack, YF = yellowfin, DO = dolphin

Table 26. --Summary of pole-and-line fishing, Charles H. Gilbert cruise 35 (cont'd)

Date,	Time,	Pos	ition	Number	Number of	Number caught	Amount of bait,
1957	LT	Latitude	Longitude	passes	minutes _chummed	and species 1/	buckets
11/24	1237	08°12'S	140°41'W	6	13	87 SJ	12.0
11/24	1341	08°12'S	140°41'W	1	25	480 SJ	18.0
11/25	0938	07°51'S	140°11'W	1	7	0 ?	5.0
11/25	1013	07°52'S	140°10'W	4	4	6 SJ	6.0
11/26	1305	08°56'S	139°29'W	1	2	0 ?	. 5
11/26	1334	08°59'S	139°31'W	6	33	28 SJ	15.0
11/27	1138	09°42'S	138°47'W	2	3	0 ?	1.0
11/27	1210	09°45'S	138°46'W	4	8	0 ?	2.0
11/28	1154	10°01'S	138°51'W	1	3	0 ?	1.0
11/28	1254	10°08'S			20	233 SJ	14.0
11/29	0801	10°19'S	138°52'W	4	7	0 ?	3.0
11/29	1009	10°01'S	139°09'W	3	11	26 SJ, 2 YF	6.0

 $[\]frac{1}{2}$ SJ = skipjack, YF = yellowfin

Table 27. -- Summary of pole-and-line fishing, Hugh M. Smith cruise 43

1958 LT	Date,	Time,	Posi	tion	Number	Number	Number caught	Amount
1/18			Latitude	Longitude	of passes			of bait, buckets
1/18	1/18	1039	08°34'S	140°38'W	1	31	210 SJ	14.0
1/18			08°15'S	140°43'W	2	18	0 SJ	
1/19			08°05'S	140°45'W	4	10	8 SJ	2.0
1/19			07°50'S	140°14'W	5	18	0 SJ	
1/20				140°14'W	4	11	0 SJ	-
1/20			08°52'S	139°16'W	1	3		_
1/20					1	1		. 5
1/21				•	7			
1/21					1			
1/21 1000 09*18'S 139*03'W 1 5 0 YF 1.0 1/21 1025 09*20'S 139*00'W 5 16 4 SJ 3.0 1/21 1410 09*30'S 138*51'W 1 3 0 YF 1.0 1/22 1044 10*03'S 138*53'W 2 7 0 YF and SJ 1.0 1/22 1059 10*04'S 138*52'W 6 16 9 SJ, 1 YF 12.0 1/22 1059 10*04'S 138*52'W 6 16 9 SJ, 1 YF 12.0 1/22 1537 10*19'S 138*28'W 1 2 0 YF and SJ 1.0 1/23 106 10*00'S 139*23'W 6 16 0 SJ 1.0 1/23 1106 10*00'S 139*23'W 6 16 0 SJ 8.0 1/25 0834 09*09'S 140*08'W 4 23 193 SJ 13.0 1/28 0748 09*13'S 138*18'W 4 7 0 ? 4.5 1/28 0908 09*16'S 138*12'W 1 1 0 SJ .5 1/28 0908 09*16'S 138*25'W 1 3 0 ? 2.0 1/28 1340 09*19'S 137*35'W 3 14 0 SJ 9.0 1/29 0943 09*10'S 136*29'W 1 12 45 SJ 10.0 1/29 0943 09*10'S 136*29'W 1 12 45 SJ 15.0 1/29 1057 09*10'S 139*31'W 5 16 0 SJ 3.0 1/30 1238 09*12'S 139*24'W 3 12 0 ? 4.0 1/30 1238 09*0'S 139*38'W 2 5 0 SJ 3.0 1/30 1638 09*0S'S 139*38'W 2 5 0 SJ 3.0 1/30 1638 09*0S'S 139*38'W 2 5 0 SJ 3.0 1/30 1638 09*0S'S 139*38'W 1 23 92 SJ 10.0 1/31 1527 11*52'S 139*40'W 1 5 5 SJ 3.5 2/1 1343 12*02'S 139*34'W 1 5 5 SJ 3.5 2/2 1425 09*17'S 139*34'W 1 5 5 SJ 3.5 2/3 1436 09*12'S 140*34'W 1 5 5 SJ 3.5 2/4 1425 09*17'S 139*41'W 1 3 0 ? 1.0 2/5 1717 09*09'S 140*45'W 1 2 0 SJ 1.0 2/5 1717 09*09'S 140*45'W 1 3 0 ? 1.0 2/5 1717 09*09'S 140*45'W 1 3 0 ? 1.0 2/6 0907 09*09'S 140*34'W 1 3 0 ? 1.0 2/7 1426 09*12'S 140*34'W 1 3 0 ? 1.0 2/7 1426 09*12'S 140*34'W 1 3 0 ? 1.0 2/7 1426 09*12'S 140*34'W 1 3 0 ? 1.0 2/7 1426 09*12'S 140*34'W 1 3 0 ?			- ,					
1/21	-,	0001	,					
1/21								
1/22 1044 10°03'S 138°53'W 2 7 0 YF and SJ 1.0 1/22 1059 10°04'S 138°52'W 6 16 9 SJ, 1 YF 12.0 1/22 1537 10°19'S 138°28'W 1 3 0 YF and SJ 1.0 1/22 1621 10°27'S 138°30'W 1 2 0 YF and SJ 1.0 1/23 1106 10°00'S 139°23'W 6 16 0 SJ 8.0 1/25 0834 09°09'S 140°08'W 4 23 193 SJ 13.0 1/28 0748 09°13'S 138°18'W 4 7 0 ? 4.5 1/28 0908 09°16'S 138°12'W 1 1 0 SJ .5 1/28 0932 09°15'S 138°06'W 1 3 0 ? 2.0 1/28 1340 09°19'S 137°35'W 3 14 0 SJ 9.0 1/28 1551 09°18'S 138°29'W 1 19 147 SJ 10.0 1/29 0943 09°10'S 136°39'W 1 4 0 SJ 3.0 1/30 1238 09°12'S 139°38'W 2 4 0 SJ 3.0 3.0 1/30 1238 09°12'S 139°38'W 2 5 0 SJ 3.0 1/30 1402 09°10'S 139°38'W 2 5 0 SJ 3.0 1/30 1633 09°08'S 139°38'W 1 23 92 SJ 10.0 1/30 1633 09°08'S 139°38'W 1 23 92 SJ 10.0 1/34 12°48'S 139°36'W 2 8 0 SJ 3.0 2/1 0953 12°34'S 139°36'W 1 5 5 SJ 3.5 2/1 0953 12°34'S 139°36'W 1 5 5 SJ 3.5 2/2 1135 09°42'S 139°39'W 1 10 0 SJ 1.0 2/1 1527 11°52'S 139°40'W 1 5 5 SJ 3.5 2/2 1135 09°42'S 139°39'W 1 10 0 SJ 1.0 2/1 1527 11°52'S 139°40'W 3 19 91 SJ 8.0 2/2 115 09°42'S 139°39'W 1 10 0 SJ 1.5 2/2 115 09°42'S 139°39'W 1 10 0 SJ 1.5 2/2 1436 09°14'S 139°40'W 1 5 5 SJ 3.5 2/2 1436 09°14'S 139°40'W 1 10 0 SJ 1.0 2/1 1527 11°52'S 139°40'W 1 10 0 SJ 1.5 2/2 1425 09°14'S 139°40'W 1 10 0 SJ 1.5 2/2 1436 09°14'S 139°40'W 1 10 0 SJ 1.5 2/2 1436 09°14'S 139°40'W 1 10 0 SJ 1.5 2/2 1436 09°14'S 140°40'W 1 2 0 SJ 1.0 2/4 1426 09°12'S 140°40'W 1 3 0 ? 1.0 2/4 1426 09°12'S 141°16'W 2 25 137 SJ 15.0 2/4 1426 09°12'S 141°16'W 2 25 137 S								
1/22								
1/22 1537 10°19'S 138°28'W 1 3 0 YF and SJ 1.0 1/22 1621 10°27'S 138°30'W 1 2 0 YF and SJ 1.0 1/23 106 10°00'S 139°23'W 6 16 0 SJ 8.0 1/25 0834 09°09'S 140°08'W 4 23 193 SJ 13.0 1/28 0748 09°13'S 138°18'W 4 7 0 ? 4.5 1/28 0948 09°16'S 138°12'W 1 1 0 SJ .5 1/28 0932 09°15'S 138°06'W 1 3 0 ? 2.0 1/28 1340 09°19'S 137°35'W 3 14 0 SJ 9.0 1/28 1551 09°18'S 137°25'W 1 19 147 SJ 10.0 1/29 0943 09°10'S 136°29'W 1 12 45 SJ 15.0 1/29 1057 09°10'S 136°39'W 1 4 0 SJ 3.0 1/30 1238 09°12'S 139°34'W 3 12 0 ? 4.0 1/30 1402 09°10'S 139°31'W 5 16 0 SJ 12.0 1/30 1402 09°10'S 139°31'W 5 16 0 SJ 3.0 1/30 1658 09°08'S 139°38'W 1 23 92 SJ 10.0 1/30 1658 09°08'S 139°38'W 1 23 92 SJ 10.0 1/31 1658 09°08'S 139°36'W 1 1 0 7 1.0 1/31 1527 11°52'S 139°40'W 1 5 5 SJ 3.5 2/1 0743 12°48'S 139°40'W 1 5 5 SJ 3.5 2/1 1343 12°02'S 139°30'W 1 10 0 SJ 1.0 2/1 1527 11°52'S 139°40'W 1 5 5 SJ 3.5 2/2 1135 09°42'S 139°39'W 1 10 0 SJ 1.0 2/3 1238 09°12'S 139°39'W 1 10 0 SJ 1.5 2/2 1436 09°14'S 139°40'W 3 19 91 SJ 8.0 2/3 1238 09°12'S 140°43'W 2 6 0 SJ 1.5 2/4 1425 09°11'S 139°40'W 1 3 0 ? 1.0 2/5 1717 09°09'S 140°45'W 1 2 0 SJ 1.0 2/6 0907 09°08'S 140°45'W 1 2 0 SJ 1.0 2/7 1426 09°12'S 141°16'W 2 25 137 SJ 15.0 2/7 1426 09°12'S 141°16'W 2 25 137 SJ 15.0 2/10 1054 06°05'S 139°32'W 1 4 0 SJ 1.0 2/10 1054 06°05'S 139°32'W 1 4 0 SJ 1.0 2/10 1054 06°05'S 139°32'W 1 4 0 SJ 1.0 2/10 1228 05°56'S 139°32'W 1 4 0 ? 1.0 2/10 1316 05°56'S 139°32'W 1 4								
1/22								
1/23								
1/25								
1/28					6			
1/28 0908 09*16'S 138*12'W 1 1 1 0 SJ .5 1/28 0932 09*15'S 138*06'W 1 3 0 ? 2.0 1/28 1340 09*19'S 137*35'W 3 14 0 SJ 9.0 1/28 1551 09*18'S 137*25'W 1 19 147 SJ 10.0 1/29 0943 09*10'S 136*29'W 1 12 45 SJ 15.0 1/29 1057 09*10'S 136*39'W 1 4 0 SJ 3.0 1/30 1238 09*12'S 139*24'W 3 12 0 ? 4.0 1/30 1548 09*08'S 139*31'W 5 16 0 SJ 12.0 1/30 1548 09*08'S 139*38'W 1 23 92 SJ 10.0 1/30 1633 09*08'S 139*38'W 1 23 92 SJ 10.0 1/30 1658 09*05'S 139*36'W 1 1 0 0 ? 1.0 2/1 0743 12*34'S 139*36'W 1 5 5 5 SJ 3.5 2/1 1343 12*02'S 139*37'W 1 10 0 SJ 1.0 2/1 1527 11*52'S 139*37'W 1 10 0 SJ 1.0 2/2 1135 09*42'S 139*37'W 1 10 0 SJ 1.0 2/2 1135 09*42'S 139*37'W 1 10 0 SJ 1.0 2/2 1135 09*42'S 139*37'W 1 10 0 SJ 1.0 2/2 1425 09*17'S 139*41'W 1 3 0 SJ 5.5 2/2 1425 09*17'S 139*41'W 1 3 0 SJ 5.5 2/2 1425 09*17'S 139*41'W 1 3 0 SJ 5.5 2/2 1425 09*17'S 139*41'W 1 3 0 SJ 5.5 2/2 1426 09*17'S 139*41'W 1 3 0 SJ 5.5 2/2 1427 09*14'S 139*04'W 3 10 0 SJ 1.5 2/2 1428 09*12'S 140*32'W 2 6 0 SJ 4.0 2/5 1313 09*12'S 140*32'W 2 6 0 SJ 7.0 2/6 0907 09*08'S 140*45'W 1 3 0 ? 1.0 2/7 1426 09*12'S 140*34'W 1 3 0 ? 1.0 2/7 1426 09*12'S 140*34'W 1 3 0 ? 1.0 2/7 1229 09*14'S 139*38'W 1 6 32 SJ 5.0 2/10 1054 06*05'S 139*38'W 1 6 32 SJ 5.0 2/10 1054 06*05'S 139*38'W 1 4 0 SJ 1.0 2/10 1054 06*05'S 139*38'W 1 4 0 SJ 5.0 2/10 1054 06*05'S 139*31'W 1 4 0 SJ 5.0 2/10 1054 06*05'S 139*32'W 1 4 0 7 5.0 2/10 1228 05*56'S 139*32'W 1 4 0 7 5.0	1/25	0834		140°08'W	4		•	
1/28 0932 09°15'S 138°06'W 1 3 0 ? 2.0 1/28 1340 09°19'S 137°35'W 3 14 0 SJ 9.0 1/28 1551 09°18'S 137°25'W 1 19 147 SJ 10.0 1/29 0943 09°10'S 136°29'W 1 12 45 SJ 15.0 1/29 1057 09°10'S 136°39'W 1 4 0 SJ 3.0 1/30 1238 09°12'S 139°24'W 3 12 0 ? 4.0 1/30 1402 09°10'S 139°31'W 5 16 0 SJ 12.0 1/30 1402 09°10'S 139°38'W 2 5 0 SJ 3.0 1/30 1638 09°05'S 139°36'W 2 8 0 SJ 3.0 1/30 1658 09°05'S 139°36'W 2 8 0 SJ 3.0 2/1 0743 12°48'S 139°36'W 1 1 0 ? 1.0 2/1 0753	1/28	0748	09°13'S	138°18'W	4	7	0 ?	4.5
1/28 1340 09°19'S 137°35'W 3 14 0 SJ 9.0 1/28 1551 09°18'S 137°25'W 1 19 147 SJ 10.0 1/29 0943 09°10'S 136°29'W 1 12 45 SJ 15.0 1/29 1057 09°10'S 136°39'W 1 4 0 SJ 3.0 1/30 1238 09°12'S 139°31'W 5 16 0 SJ 12.0 1/30 1402 09°10'S 139°31'W 5 16 0 SJ 3.0 1/30 1548 09°08'S 139°38'W 2 5 0 SJ 3.0 1/30 1633 09°08'S 139°36'W 1 23 92 SJ 10.0 1/30 1658 09°05'S 139°36'W 1 1 0 ? 1.0 2/1 0743 12°48'S 139°36'W 1 1 0 ? 1.0 2/1 1053 12°34'S 139°36'W 1 5 5 SJ 3.5 2/1 1343 <	1/28	0908	09°16'S	138°12'W	1	1	0 SJ	. 5
1/28 1551 09°18'S 137°25'W 1 19 147 SJ 10.0 1/29 0943 09°10'S 136°29'W 1 12 45 SJ 15.0 1/29 1057 09°10'S 136°39'W 1 4 0 SJ 3.0 1/30 1238 09°12'S 139°24'W 3 12 0 ? 4.0 1/30 1402 09°10'S 139°31'W 5 16 0 SJ 12.0 1/30 1548 09°08'S 139°38'W 2 5 0 SJ 3.0 1/30 1633 09°08'S 139°36'W 1 1 0 ? 1.0 2/1 0743 12°48'S 139°36'W 2 8 0 SJ 3.0 2/1 0953 12°34'S 139°36'W 1 5 5 SJ 3.5 2/1 1343 12°02'S 139°37'W 1 10 0 SJ 1.0 2/1 1527 1425 09°17'S 139°41'W 1 3 0 SJ 15 2/2 142	1/28	0932	09°15'S	138°06'W	1	3	0 ?	2.0
1/29	1/28	1340	09°19'S	137°35'W	3	14	0 SJ	9.0
1/29 1057 09°10'S 136°39'W 1 4 0 SJ 3.0 1/30 1238 09°12'S 139°24'W 3 12 0 ? 4.0 1/30 1402 09°10'S 139°31'W 5 16 0 SJ 12.0 1/30 1548 09°08'S 139°38'W 2 5 0 SJ 3.0 1/30 1633 09°05'S 139°36'W 1 23 92 SJ 10.0 1/30 1658 09°05'S 139°36'W 1 1 0 ? 1.0 2/1 0743 12°48'S 139°36'W 2 8 0 SJ 3.0 2/1 0743 12°48'S 139°36'W 1 5 5 SJ 3.5 2/1 0743 12°48'S 139°36'W 1 5 5 SJ 3.0 2/1 0753 12°34'S 139°37'W 1 10 0 SJ 1.0 2/1 1527 11°52'S 139°37'W 1 10 79 SJ 15.0 2/2 1425 09°1	1/28	1551	09°18'S	137°25'W	1	19	147 SJ	10.0
1/30 1238 09°12'S 139°24'W 3 12 0 ? 4.0 1/30 1402 09°10'S 139°31'W 5 16 0 SJ 12.0 1/30 1548 09°08'S 139°38'W 2 5 0 SJ 3.0 1/30 1633 09°08'S 139°36'W 1 23 92 SJ 10.0 1/30 1658 09°05'S 139°36'W 2 8 0 SJ 3.0 2/1 0743 12°48'S 139°36'W 2 8 0 SJ 3.0 2/1 0953 12°34'S 139°36'W 2 8 0 SJ 3.0 2/1 0953 12°34'S 139°36'W 1 1 0 ? 1.0 2/1 0953 12°34'S 139°36'W 1 1 0 SJ 3.5 2/1 1343 12°02'S 139°37'W 1 10 0 SJ 1.0 2/2 1135 09°42'S 139°39'W 1 10 79 SJ 15.0 2/2	1/29	0943	09°10'S	136°29'W	1	12	45 SJ	15.0
1/30 1402 09°10'S 139°31'W 5 16 0 SJ 12.0 1/30 1548 09°08'S 139°38'W 2 5 0 SJ 3.0 1/30 1633 09°08'S 139°38'W 1 23 92 SJ 10.0 1/30 1658 09°05'S 139°36'W 1 1 0 ? 1.0 2/1 0743 12°48'S 139°36'W 2 8 0 SJ 3.0 2/1 0953 12°34'S 139°40'W 1 5 5 SJ 3.5 2/1 1343 12°02'S 139°37'W 1 10 0 SJ 1.0 2/1 1527 11°52'S 139°40'W 3 19 91 SJ 8.0 2/2 1425 09°42'S 139°39'W 1 10 79 SJ 15.0 2/2 1436 09°14'S 139°34'W 1 3 0 SJ .5 2/2 1436 09°14'S 139°34'W 1 3 0 SJ 1.5 2/5 1233 09°12	1/29	1057	09°10'S	136°39'W	1	4	0 SJ	3.0
1/30 1548 09°08'S 139°38'W 2 5 0 SJ 3.0 1/30 1633 09°08'S 139°36'W 1 23 92 SJ 10.0 1/30 1658 09°05'S 139°36'W 1 1 0 ? 1.0 2/1 0743 12°48'S 139°36'W 2 8 0 SJ 3.0 2/1 0953 12°34'S 139°36'W 1 5 5 SJ 3.5 2/1 0953 12°34'S 139°40'W 1 1 0 0 SJ 1.0 2/1 1527 11°52'S 139°39'W 1 10 0 SJ 15.0 2/2 1135 09°42'S 139°39'W 1 10 79 SJ 15.0 2/2 1425 09°17'S 139°41'W 1 3 0 SJ .5 2/2 1436 09°14'S 139°04'W 3 10 0 SJ 1.5 2/5 1233 09°12'S 140°32'W 2 6 0 SJ 1.0 2/5 1313	1/30	1238	09°12'S	139°24'W	3	12	0 ?	4.0
1/30 1633 09°08'S 139°38'W 1 23 92 SJ 10.0 1/30 1658 09°05'S 139°36'W 1 1 0 ? 1.0 2/1 0743 12°48'S 139°36'W 2 8 0 SJ 3.0 2/1 0953 12°34'S 139°40'W 1 5 5 SJ 3.5 2/1 1343 12°02'S 139°37'W 1 10 0 SJ 1.0 2/1 1527 11°52'S 139°40'W 3 19 91 SJ 8.0 2/2 1135 09°42'S 139°39'W 1 10 79 SJ 15.0 2/2 1425 09°17'S 139°41'W 1 3 0 SJ .5 2/2 1436 09°14'S 139°04'W 3 10 0 SJ 1.5 2/5 1233 09°12'S 140°32'W 2 6 0 SJ 4.0 2/5 1313 09°12'S 140°34'W 1 3 0 ? 1.0 2/5 1717 09°09'S 140°45'W 1 2 0 SJ 1.0 2/6 0907 09°08'S 142°10'W 1 3 0 ? 1.0 2/7 1229 09°14'S 141°16'W 2 25 137 SJ 15.0 2/9 0739 09°00'S 139°38'W 1 6 32 SJ 5.0 2/10 1316 05°56'S 139°32'W 1 4 0 ? 1.0	1/30	1402	09°10'S	139°31'W	5	16	0 SJ	12.0
1/30 1658 09°05'S 139°36'W 1 1 1 0 ? 1.0 2/1 0743 12°48'S 139°36'W 2 8 0 SJ 3.0 2/1 0953 12°34'S 139°40'W 1 5 5 SJ 3.5 2/1 1343 12°02'S 139°37'W 1 10 0 SJ 1.0 2/1 1527 11°52'S 139°40'W 3 19 91 SJ 8.0 2/2 1135 09°42'S 139°39'W 1 10 79 SJ 15.0 2/2 1425 09°17'S 139°41'W 1 3 0 SJ 5.5 2/2 1446 09°12'S 140°32'W 2 6 0 SJ 1.5 2/5 1233 09°12'S 140°32'W 2 6 0 SJ 4.0 2/5 1313 09°12'S 140°34'W 1 3 0 ? 1.0 2/5 1717 09°09'S 140°45'W 1 2 0 SJ 1.0 2/6 0907 09°08'S 142°10'W 1 3 0 ? 1.0 2/7 1229 09°14'S 141°24'W 5 18 0 SJ 7.0 2/7 1426 09°12'S 141°45'W 1 3 0 ? 1.0 2/7 1426 09°12'S 141°45'W 1 6 32 SJ 5.0 2/10 1054 06°05'S 139°31'W 1 4 0 SJ 1.0 2/10 1228 05°56'S 139°32'W 1 3 0 ? 5.5 2/10 1316 05°56'S 139°32'W 1 3 0 ? 5.5 2/10 1316 05°56'S 139°32'W 1 4 0 ?	1/30	1548	09°08'S	139°38'W	2	5	0 SJ	3.0
2/1 0743 12°48'S 139°36'W 2 8 0 SJ 3.0 2/1 0953 12°34'S 139°40'W 1 5 5 SJ 3.5 2/1 1343 12°02'S 139°37'W 1 10 0 SJ 1.0 2/1 1527 11°52'S 139°40'W 3 19 91 SJ 8.0 2/2 1135 09°42'S 139°39'W 1 10 79 SJ 15.0 2/2 1425 09°17'S 139°41'W 1 3 0 SJ .5 2/2 1436 09°14'S 139°04'W 3 10 0 SJ 1.5 2/5 1233 09°12'S 140°32'W 2 6 0 SJ 4.0 2/5 1313 09°12'S 140°34'W 1 3 0 ? 1.0 2/5 1717 09°09'S 140°45'W 1 2 0 SJ 1.0 2/6 0907 09°08'S 142°10'W 1 3 0 ? 1.0 2/7 1229 09°14'S	1/30	1633	09°08'S	139°38'W	1	23	92 SJ	10.0
2/1 0743 12°48'S 139°36'W 2 8 0 SJ 3.0 2/1 0953 12°34'S 139°40'W 1 5 5 SJ 3.5 2/1 1343 12°02'S 139°37'W 1 10 0 SJ 1.0 2/1 1527 11°52'S 139°40'W 3 19 91 SJ 8.0 2/2 1135 09°42'S 139°39'W 1 10 79 SJ 15.0 2/2 1425 09°17'S 139°41'W 1 3 0 SJ .5 2/2 1436 09°14'S 139°04'W 3 10 0 SJ 1.5 2/5 1233 09°12'S 140°32'W 2 6 0 SJ 4.0 2/5 1313 09°12'S 140°34'W 1 3 0 ? 1.0 2/5 1717 09°09'S 140°45'W 1 2 0 SJ 1.0 2/6 0907 09°08'S 142°10'W 1 3 0 ? 1.0 2/7 1229 09°14'S	1/30	1658	09°05'S	139°36'W	1	1	0 ?	1.0
2/1 0953 12°34'S 139°40'W 1 5 5 SJ 3.5 2/1 1343 12°02'S 139°37'W 1 10 0 SJ 1.0 2/1 1527 11°52'S 139°40'W 3 19 91 SJ 8.0 2/2 1135 09°42'S 139°39'W 1 10 79 SJ 15.0 2/2 1425 09°17'S 139°41'W 1 3 0 SJ .5 2/2 1436 09°14'S 139°04'W 3 10 0 SJ 1.5 2/5 1233 09°12'S 140°32'W 2 6 0 SJ 4.0 2/5 1313 09°12'S 140°34'W 1 3 0 ? 1.0 2/5 1717 09°09'S 140°45'W 1 2 0 SJ 1.0 2/6 0907 09°08'S 142°10'W 1 3 0 ? 1.0 2/7 1229 09°14'S 141°16'W 2 25 137 SJ 15.0 2/9 0739 09°00'S <td></td> <td></td> <td></td> <td>139°36'W</td> <td>2</td> <td>8</td> <td>0 SJ</td> <td>3.0</td>				139°36'W	2	8	0 SJ	3.0
2/1 1343 12°02'S 139°37'W 1 10 0 SJ 1.0 2/1 1527 11°52'S 139°40'W 3 19 91 SJ 8.0 2/2 1135 09°42'S 139°39'W 1 10 79 SJ 15.0 2/2 1425 09°17'S 139°41'W 1 3 0 SJ .5 2/2 1436 09°14'S 139°04'W 3 10 0 SJ 1.5 2/5 1233 09°12'S 140°32'W 2 6 0 SJ 4.0 2/5 1313 09°12'S 140°34'W 1 3 0 ? 1.0 2/5 1717 09°09'S 140°45'W 1 2 0 SJ 1.0 2/6 0907 09°08'S 142°10'W 1 3 0 ? 1.0 2/7 1229 09°14'S 141°24'W 5 18 0 SJ 7.0 2/7 1426 09°12'S 141°16'W 2 25 137 SJ 15.0 2/9 0739 09°00'S </td <td></td> <td></td> <td>12°34'S</td> <td>139°40'W</td> <td>1</td> <td>5</td> <td>5 SJ</td> <td></td>			12°34'S	139°40'W	1	5	5 SJ	
2/1 1527 11°52'S 139°40'W 3 19 91 SJ 8.0 2/2 1135 09°42'S 139°39'W 1 10 79 SJ 15.0 2/2 1425 09°17'S 139°41'W 1 3 0 SJ .5 2/2 1436 09°14'S 139°04'W 3 10 0 SJ 1.5 2/5 1233 09°12'S 140°32'W 2 6 0 SJ 4.0 2/5 1313 09°12'S 140°34'W 1 3 0 ? 1.0 2/5 1717 09°09'S 140°45'W 1 2 0 SJ 1.0 2/6 0907 09°08'S 142°10'W 1 3 0 ? 1.0 2/7 1229 09°14'S 141°24'W 5 18 0 SJ 7.0 2/7 1426 09°12'S 141°16'W 2 25 137 SJ 15.0 2/9 0739 09°00'S 139°38'W 1 6 32 SJ 5.0 2/10 1054 06°05'S<			12°02'S	139°37'W	1			
2/2 1135 09°42'S 139°39'W 1 10 79 SJ 15.0 2/2 1425 09°17'S 139°41'W 1 3 0 SJ .5 2/2 1436 09°14'S 139°04'W 3 10 0 SJ 1.5 2/5 1233 09°12'S 140°32'W 2 6 0 SJ 4.0 2/5 1313 09°12'S 140°34'W 1 3 0 ? 1.0 2/5 1717 09°09'S 140°45'W 1 2 0 SJ 1.0 2/6 0907 09°08'S 142°10'W 1 3 0 ? 1.0 2/7 1229 09°14'S 141°24'W 5 18 0 SJ 7.0 2/7 1426 09°12'S 141°16'W 2 25 137 SJ 15.0 2/9 0739 09°00'S 139°38'W 1 6 32 SJ 5.0 2/10 1054 06°05'S 139°31'W 1 4 0 SJ 1.0 2/10 1316 05°56'S </td <td>2/1</td> <td>1527</td> <td></td> <td>139°40'W</td> <td>3</td> <td>19</td> <td></td> <td>8.0</td>	2/1	1527		139°40'W	3	19		8.0
2/2 1425 09°17'S 139°41'W 1 3 0 SJ .5 2/2 1436 09°14'S 139°04'W 3 10 0 SJ 1.5 2/5 1233 09°12'S 140°32'W 2 6 0 SJ 4.0 2/5 1313 09°12'S 140°34'W 1 3 0 ? 1.0 2/5 1717 09°09'S 140°45'W 1 2 0 SJ 1.0 2/6 0907 09°08'S 142°10'W 1 3 0 ? 1.0 2/7 1229 09°14'S 141°24'W 5 18 0 SJ 7.0 2/7 1426 09°12'S 141°16'W 2 25 137 SJ 15.0 2/9 0739 09°00'S 139°38'W 1 6 32 SJ 5.0 2/10 1054 06°05'S 139°31'W 1 4 0 SJ 1.0 2/10 1228 05°56'S 139°32'W 1 3 0 ? .5 2/10 1316 05°56'S	2/2	1135		139°39'W	1		79 SJ	15.0
2/2 1436 09°14'S 139°04'W 3 10 0 SJ 1.5 2/5 1233 09°12'S 140°32'W 2 6 0 SJ 4.0 2/5 1313 09°12'S 140°34'W 1 3 0 ? 1.0 2/5 1717 09°09'S 140°45'W 1 2 0 SJ 1.0 2/6 0907 09°08'S 142°10'W 1 3 0 ? 1.0 2/7 1229 09°14'S 141°24'W 5 18 0 SJ 7.0 2/7 1426 09°12'S 141°16'W 2 25 137 SJ 15.0 2/9 0739 09°00'S 139°38'W 1 6 32 SJ 5.0 2/10 1054 06°05'S 139°31'W 1 4 0 SJ 1.0 2/10 1228 05°56'S 139°32'W 1 3 0 ? .5 2/10 1316 05°56'S 139°27'W 1 4 0 ? 1.0	2/2	1425		139°41'W	1		0 SJ	. 5
2/5 1233 09°12'S 140°32'W 2 6 0 SJ 4.0 2/5 1313 09°12'S 140°34'W 1 3 0 ? 1.0 2/5 1717 09°09'S 140°45'W 1 2 0 SJ 1.0 2/6 0907 09°08'S 142°10'W 1 3 0 ? 1.0 2/7 1229 09°14'S 141°24'W 5 18 0 SJ 7.0 2/7 1426 09°12'S 141°16'W 2 25 137 SJ 15.0 2/9 0739 09°00'S 139°38'W 1 6 32 SJ 5.0 2/10 1054 06°05'S 139°31'W 1 4 0 SJ 1.0 2/10 1228 05°56'S 139°32'W 1 3 0 ? .5 2/10 1316 05°56'S 139°27'W 1 4 0 ? 1.0		1436		139°04'W	3			1.5
2/5 1313 09°12'S 140°34'W 1 3 0 ? 1.0 2/5 1717 09°09'S 140°45'W 1 2 0 SJ 1.0 2/6 0907 09°08'S 142°10'W 1 3 0 ? 1.0 2/7 1229 09°14'S 141°24'W 5 18 0 SJ 7.0 2/7 1426 09°12'S 141°16'W 2 25 137 SJ 15.0 2/9 0739 09°00'S 139°38'W 1 6 32 SJ 5.0 2/10 1054 06°05'S 139°31'W 1 4 0 SJ 1.0 2/10 1228 05°56'S 139°32'W 1 3 0 ? .5 2/10 1316 05°56'S 139°27'W 1 4 0 ? 1.0	2/5		09°12'S	140°32'W				4.0
2/6 0907 09°08'S 142°10'W 1 3 0 ? 1.0 2/7 1229 09°14'S 141°24'W 5 18 0 SJ 7.0 2/7 1426 09°12'S 141°16'W 2 25 137 SJ 15.0 2/9 0739 09°00'S 139°38'W 1 6 32 SJ 5.0 2/10 1054 06°05'S 139°31'W 1 4 0 SJ 1.0 2/10 1228 05°56'S 139°32'W 1 3 0 ? .5 2/10 1316 05°56'S 139°27'W 1 4 0 ? 1.0	2/5	1313	09°12'S	140°34'W			0 ?	1.0
2/6 0907 09°08'S 142°10'W 1 3 0 ? 1.0 2/7 1229 09°14'S 141°24'W 5 18 0 SJ 7.0 2/7 1426 09°12'S 141°16'W 2 25 137 SJ 15.0 2/9 0739 09°00'S 139°38'W 1 6 32 SJ 5.0 2/10 1054 06°05'S 139°31'W 1 4 0 SJ 1.0 2/10 1228 05°56'S 139°32'W 1 3 0 ? .5 2/10 1316 05°56'S 139°27'W 1 4 0 ? 1.0	2/5	1717	09°09'S	140°45'W	1	2	0 SJ	1.0
2/7 1229 09°14'S 141°24'W 5 18 0 SJ 7.0 2/7 1426 09°12'S 141°16'W 2 25 137 SJ 15.0 2/9 0739 09°00'S 139°38'W 1 6 32 SJ 5.0 2/10 1054 06°05'S 139°31'W 1 4 0 SJ 1.0 2/10 1228 05°56'S 139°32'W 1 3 0 ? .5 2/10 1316 05°56'S 139°27'W 1 4 0 ? 1.0	2/6							
2/7 1426 09°12'S 141°16'W 2 25 137 SJ 15.0 2/9 0739 09°00'S 139°38'W 1 6 32 SJ 5.0 2/10 1054 06°05'S 139°31'W 1 4 0 SJ 1.0 2/10 1228 05°56'S 139°32'W 1 3 0 ? .5 2/10 1316 05°56'S 139°27'W 1 4 0 ? 1.0								7.0
2/9 0739 09°00'S 139°38'W 1 6 32 SJ 5.0 2/10 1054 06°05'S 139°31'W 1 4 0 SJ 1.0 2/10 1228 05°56'S 139°32'W 1 3 0 ? .5 2/10 1316 05°56'S 139°27'W 1 4 0 ? 1.0								
2/10 1054 06°05'S 139°31'W 1 4 0 SJ 1.0 2/10 1228 05°56'S 139°32'W 1 3 0 ? .5 2/10 1316 05°56'S 139°27'W 1 4 0 ? 1.0		0739	09°00'S					
2/10 1228 05°56'S 139°32'W 1 3 0 ? .5 2/10 1316 05°56'S 139°27'W 1 4 0 ? 1.0	2/10			•				
2/10 1316 05°56'S 139°27'W 1 4 0? 1.0	2/10	1228						. 5
·	2/10	1316	05°56'S					
	2/10	1346	06°00'S					

 $\frac{1}{SJ}$ = skipjack, YF = yellowfin

Table 28. -- Summary of pole-and-line fishing, Charles H. Gilbert cruise 38

Date,	Time,	Posi	tion	Number	Number	Number caught	Amount
1958	LT	Latitude	Longitude	of passes	minutes chummed	and species1/	of bait, buckets
2/27	0755	08°49'S	140°16'W	3	16	76 SJ and YF	10.0
2/28	1040	07°46'S	140°14'W	1	5	0 SJ and YF	2.0
2/28	1200	07°43'S	140°10'W	1	3	0 YF	1.0
2/28	1430	07°57 ' S	139°47'W	2	9	32 SJ and YF	7.0
3/1	0545	08°08'S	139°36'W	5	11	9 SJ	9.0
3/1	0745	08°21'S	139°30'W	4	9	0 SJ	2.5
3/1	0952	08°23 ' S	139°26'W	2	3	0 SJ and YF	1.0
3/2	0940	09°22'S	139°02'W	4	6	30 SJ	7.0
3/3	0945	10°01'S	138°52'W	4	15	229 SJ	14.0
3/3	1115	10°06 ' S	138°51'W	2	5	0 SJ	1.0
3/4	0955	10°04¹S	138°59¹W	4	6	0 SJ	5.0
3/4	1210	10°02'S	139°06'W	4	10	0 SJ	5.0
3/7	0900	09°10'S	140°00'W	5	11	0 SJ	4.0
3/7	0945	09°09'S	140°01'W	1	15	68 S J	3.0
3/12	0937	14°44¹S	146°39'W	1	17	87 SJ	15.0
3/13	0750	14°47'S	147°54'W	2	8	96 S J	15.0
3/26	0625	10°11'S	139°33'W	2	4	0 SJ	3.0
3/28	0715	09°00'S	137°29'W	1	6	85 S J	8.0
3/29	0712	08°46'S	139°45'W	2	5	0 SJ	2.0
3/29	0740	08°43 ' S	139°43'W	2	4	0 SJ	2.0
3/29	0810	08°42¹S	139°42'W	2	4	0 SJ	1.0
3/29	1320	08°13'S	139°43'W	3	3	0 YF	1.0
3/29	1355	08°11'S	139°44'W	1	2	0 SJ	. 5
3/29	1410	08°04¹S	139°46'W	5	12	221 SJ	20.0
3/30	1205	05°51'S	139°38'W	1	6	0 SJ	5.0
3/31	1345	07°39'S	139°37'W	2	89	555 SJ	20.0
4/3	0950	09°08'S	140°16'W	1	2	0 ?	. 5
4/3	1330	09°11'S	140°42'W	2	2	0 SJ	1.0
4/3	1550	09°10'S	140°50'W	1	3	0 SJ	1.0
4/6	0830	10°30'S	139°40'W	3	8	0 SJ and YF	4.0
4/11	1020	08°37'S	140°39'W	1	7	1 YF	4.0
4/11	1315	08°18'S	140°41'W	2	2	0 SJ	3.0
4/11	1450	08°12¹S	140°40'W	2	7	72 SJ	10.0
4/12	1255	07°55'S	140°00'W	4	5	3 SJ	3.0
4/13	0740		139°34'W	2	2	0 ?	1.0
4/13	0950	08°31'S	139°33'W	2	2	0 ?	. 5
4/13	1020	08°36¹S	139°33'W	1	4	0 SJ	3.0
4/13	1335	08°51'S	139°31'W	3	3	0 SJ	3.0
4/14	0915	09°23'S	139°05'W	2	5	0 SJ	5.0
4/14	1020	09°06'S	139°01'W	1	3	0 SJ and YF	4.0
4/14	1205	09°34 ' S	138°54'W	1	1	0 ?	1.0
4/14	1325	09°46¹S	138°47'W	3	10	0 SJ and YF	5.0
4/14	1514	09°491S	138°50'W	1	1	0 SJ	1.0
4/15	0950	09°59 ' S	138°52'W	3	7	0 SJ and YF	4.0
4/15	1415	10°21'S	138°44'W	4	7	0 S J	5.0
4/18	1045	09°32'S	139°52'W	6	33	216 SJ	20.0

 $[\]frac{1}{2}$ SJ = skipjack, YF = yellowfin

Table 29. -- Summary of pole-and-line fishing, Hugh M. Smith cruise 45

Date,	Time,	Position Latitude Longitude		Number	Number of	Number caught	Amount
1958	LT	Latitude	Longitude	passes	minutes chummed	and species 1/	of bait, buckets
5/15	0925	09°12'S	139°37'W	2	5	0 ?	1.0
5/16	0838	09°10'S	136°47'W	2	21	115 SJ	7.0
5/16	1540	09°10'S	136°06'W	2	10	123 SJ	8.0
5/20	0915	09°18'S	142°38'W	1	10	53 SJ	7.0
5/21	1310	09°14'S	141°13'W	1	5	30 SJ	4.0
5/21	1433	09°14'S	141°04'W	3	14	17 SJ	5.0
5/24	0652	06°31'S	139°39'W	2	9	31 SJ	6.0
5/24	1045	06°08'S	139°36'W	1	2	0 SJ	. 5
5/24	1155	06°02'S	139°36'W	1	5	0 SJ	. 5
5/24	1232	05°58¹S	139°36'W	5	18	8 SJ	5.0
5/24	1622	05°37'S	139°38'W	2	3	0 SJ	1.0
5/24	1740	05°28'S	139°39'W	1	1	0 SJ	. 5
5/25	0950	07°11'S	139°42'W	2	10	51 SJ	7.0
5/25	1420	07°42'S	139°40'W	1	20	105 SJ	6.0
5/28	1137	12°17'S	139°42'W	1	5	0 SJ	1.0
5/28	0942	12°08'S	139°42'W	1	2	21 SJ	2.0
5/28	1322	12°27'S	139°42'W	2	2	0 SJ	1.0
5/29	0955	11°10'S	139°44'W	I	5	ll SJ	2.0
5/29	1255	10°52'S	139°45'W	2	3	0 ?	3.0
5/29	1337	10°51'S	139°44'W	3	5	0 ?	2.0
5/29	1514	10°43'S	139°42'W	1	1	0 ?	1.0
5/29	1540	10°38'S	139°40'W	I	2	0 SJ	1.0
5/29	1615	10°34'S	139°38'W	I	2	0 ?	1.0
5/29	1630	10°31'S	139°37'W	3	8	0 ?	7.0
5/29	1714	10°28'S	139°36'W	1	1	0 SJ	2.0
6/1	0956	08°43'S	140°33'W	2	10	22 SJ	6.0
6/1	1521	08°09'S	140°43'W	7	13	0 SJ	6.0
6/2	0718	07°53'S	140°44'W	2	4	0 SJ	3.0
6/2	0952	07°45'S	140°29'W	2	3	0 2/	1.0
6/2	1327	07°45'S	140°02'W	2	7	201 SJ	20.0
6/3	1110	08°38¹S	139°22'W	5	13	0 SJ	4.5
6/7	1500	10°35'S	138°38'W	6	8	0 SJ	10.0

 $[\]frac{1}{2}$ SJ = skipjack $\frac{2}{2}$ School judged to be composed of "sun fish"

Table 30. .-Pole-and-line caught skipjack and yellowfin length frequency by sex, Charles H. Gilbert cruise 35

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 $\frac{1}{2}$ SJ = Skipjack YF = Yellowfin

Table 30. -- Pole-and-line caught skipjack and yellowfin length frequency by sex, Charles H. Gilbert crusse 35 (cont'd)

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 $\frac{1}{2}$ SJ = Skipjack YF = Yellowfin

Table 31. -- Pole-and-line caught skipjack and yellowfin length frequency by sex, Hugh M. Smith cruise 43

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₹62-587	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		11111166	4011/21	7
₽87-277			1111142	221171	7
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Table 32. -- Pole-and-line caught skipjack length frequency by sex, Charles H. Gilbert cruise 38

	Total	110 2 2 3 3 3 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	22	13 12 9	14 11 11 11 11 11 11 11 11 11 11 11 11 1	15 28	11 12 12 12 2	12 20	147 161 24	3,32
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	+81-211	1 1 1 1 1 1 1	1 1 1	1 1 8 9	1 1 1 1		1 1 1 1 1	1 1	1 6 3	6
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	+09-96F	-4-11-111	7 7 7	2 1 1 1	1 1 1 1	7 2		1 4º W	01 7	23
	₱6₱ - 58₱		1 9	7 7 1	1 1 1 6	2 -	2 2 1 -	7 7	14 16 6	36
	₱8₱ - 52₺	1 1 1 1 1 1 1	5 2 1	2 9 1 1	1 1 1 1	w 5 4	4 7 7 1 -	- 4	14 23 5	45
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	ebulitad bns	08°50'S 140°16'W 07°57'S 139°47'W 08°08'S 139°36'W 139°02'S	10°01'S 138°52'W	09.09'S 140.01'W 14.44'S 146.39'W	14°48'S 147°54'W 09°00'S 137°29'W	08°041S 139°461W	139°38'W 08°12'S 140°40'W 07°55'S	09°32'S 139°52'W	tai	Grand total
	obusise, I	06 07 139 08 08 139 139	138	09 140 146	147 147 09 137	139	13.0	09	Total	G
0	Date, 195	2 2 2 1	m	7	13	6 -	11 21	8		
L°	301 3,50	2/27 2/27 2/28 3/1 3/1	3/3	3/7	3/13	3/29	4/11	4/18		

Table 33.--Pole-and-line caught yellowfin length frequency by sex,

Charles H. Gilbert cruise 38

58			485-49 505-51 505-61 605-61 645-65 655-66 695-70 705-71 715-72 755-74 755-76 755-76 755-76 755-79 915-92																		
Date, 195	Latitude and Longitude	Sex	85-49	51	5-	-61	645-654	2	1	705-714	5-	25-7	35-	45-	55-	765-774	75-	795-804	1 1	1 1	Total
2/27	08°50'S	М	-	_	-	_	_	_	-	-	-	_	_	2	-	-	-	-	-	-	2
	140°16'W	F	-	-	-	-	-	-	-	-	1	-	-	1	-	1	-	-	-	-	3
2/28	07°57'S	M	-	-	-	-	-	-	1	1	-	1	1	-	-	2	-	-	-	1	7
	139°47'W	F	_	-	_	-	-	-	-	1	1	1	1	1	-	1	-	-	1	-	7
3/29	08°04'S	M	_	_	_	_	_	_	_	_	-	-	-	-	1	-	-	-	-	_	1
	139°46'W	F	_	1	_	_	-	1	1	-	-	_	1	1	-	_	1	1	-	-	7
4/11	08°12'S	M	-	_	_	-	_	_	~	_	_	-	-	-	-	_	_	1	-	-	1
	140°40'W	F	-	_	_	-	-	_	_	-	-	_	_	_	_	_	_	_	_	_	-
4/18	09°32'S	M	1	_	_	•	1	_	-	_	_	_	-	-	-	_	_	_	_	_	2
	139°52'W	F	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
		M	1	-	-	-	1	-	1	1	-	1	1	2	1	2	-	I	-	I	13
	Total	F	-	1	1	1	-	1	I	1	2	1	2	3	-	2	1	1	1	-	19
	Grand total		1	1	1	1	1	1	2	2	2	2	3	5	1	4	1	2	1	1	32

Table 34. -- Pole-and-line caught sklpjack length frequency by sex, Hugh M. Smith cruise 45

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n)	₹65-585	ı.	_	t	1 1	1	ı	ι	•	1 1	1	ι	1	ı	ı	ı	•	ı	1 1	å	- 1	1	ı	1	' -	-
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		{ _																								Grand total
	6	136°06'W		136°47'W	142°38'W		141°13'W		141°04'W	N196°391W		139°36'W		139°42'W		139°40'W		139°42'W	130°441W		140°33'W		140°02'W			d to
	Longitude	0.9		6°4	.3		1 ° 1		0 . I	9°3		9°3		6.4		6.4		9°4	V . O		0.3		0.0		Total	an
		13(13	14		14		14	13		13						13		}	14		14		Ŧ	G
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	Latitude	09°10'S		S101.60	818180		09°14'S		09°14'S	06°31'S		05°581S		07°11'S		. 4		12°08'S	1101015	í	08°43'S		07°45'S			
					60		60		60	90		0.5									0.8		0.7			
0	Date, 195	5/16		5/16	5/20		5/21		5/21	5/24		5/24		5/25		5/25		5/28	5/20	ì	-	1	7			
		5/		5/	5/		5/		2	5		5/		5/		5		2	L	1	6/1		6/2			1

Table 35. --Summary of bait fishing for Marquesan sardines,
Charles H. Gilbert cruise 35

Date,	Locality	Amount seen	Number	of sets	Catch,
1957	Locality	per day, buckets	Day	Night	buckets
10/13	Taiohae, Nuku Hiva	_	4	_	100
10/23	Taiohae, Nuku Hiva	-	3	_	48
10/30	Taiohae, Nuku Hiva	-	2	-	58
11/7	Taiohae, Nuku Hiva	-	6	-	75
11/23	Taiohae, Nuku Hiva	-	3	-	158
11/28	Taa Huku, Hiva Oa	_	1	-	15
11/28	Hana Tetou, Tahu Ata	-	2	-	0
11/29	Taa Huku, Hiva Oa	-	1	-	2
12/2	Taiohae, Nuku Hiva		3	-	100
	Total		25	-	556

Table 36.--Summary of bait fishing for Marquesan sardines,
Hugh M. Smith cruise 43

Date,	7.	Amount seen	Numbe	r of sets	Catch,
1958	Locality	per day, buckets	Day	Night	buckets
1/15	Taiohae, Nuku Hiva	36-41	3	-	17
1/15	Taiohae, Nuku Hiva	-	-	1	0
1/16	Taiohae, Nuku Hiva	_	-	1	4
1/16	Taiohae, Nuku H i va	3 -4	1	-	Handful
1/16	Hanga Haa, Nuku Hiva	0	-	-	-
1/17	Anaho, Nuku Hiva	0	-	-	-
1/17	Tai Oa, Nuku Hiva	65	6	-	98
1/20	Hananai, Ua Huka	-	-	1	30
1/21	Taa Huku, Hiva Oa	-	-	1	18
1/22	Taa Huku, Hiva Oa	-	2	-	29
1/25	Haka Nai, Hua Pou	11	-	-	-
1/25	Tai Oa, Nuku Hiva	-	3	-	101
1/26	Taiohae, Nuku Hiva	40	4	•	81
1/27	Hanga Haa, Nuku Hiva	0	-	-	-
1/27	Haka Puuae, Nuku Hiva	0	-	-	-
1/27	Houmi, Nuku Hiva	50	-	-	-
1/27	Anaho, Nuku Hiva	0	-	-	-
1/27	Hatiheu, Nuku Hiva	0	-	-	-
2/2	Taiohae, Nuku Hiva	-	-	1	1
2/3	Taiohae, Nuku Hiva	157	6	-	56
2/3	Tai Oa, Nuku Hiva	0	2	-	1
2/4	Houmi, Nuku Hiva	0	-	-	-
2/4	Hanga Haa, Nuku Hiva	33	6	-	39
2/4	Haka Puuae, Nuku Hiva	-	2	-	14
2/4	Taiohae, Nuku Hiva	0	-	-	-
2/8	Hananai, Ua Huka	25	-	-	-
2/8	Hananai, Ua Huka	0	-	-	-
2/8	Vai Take, Ua Huka	0	-	~	-
2/12	Anaho, Nuku Hiva	0	_	-	-
2/12	Taiohae, Nuku Hiva	19	2	-	16
2/12	Taiohae, Nuku Hiva	20	-	2	17
2/13	Taiohae, Nuku Hiva	187	9	-	184
2/14	Taiohae, Nuku Hiva	21	3	-	4
2/14	Tai Oa, Nuku Hiva	0	3	-	4
2/14	Taiohae, Nuku Hiva	0	1	-	88
	Total		53	7	722

Table 37. -- Summary of bait fishing for Marquesan sardines,
Charles H. Gilbert cruise 38

Date,	Locality	Amount seen	Numbe	r of sets	Catch,
1958	,	per day, buckets	Day	Night	buckets
2/26	Taiohae, Nuku Hiva	15	5	_	25
2/26	Hakaui, Nuku Hiva	_	4	-	55
3/1	Hananai, Ua Huka	0	-	-	-
3/3	Taa Huku, Hiva Oa	0	1	_	0
3/3	Hana Tetou, Tahu Ata	-	1	-	41.5
3/4	Hana Tetou, Tahu Ata	0	-	-	-
3/5	Vai Tahu, Tahu Ata	0	••	-	-
3/8	Taiohae, Nuku Hiva	Scattered	8	-	25.5
3/8	Hakatea, Nuku Hiva	0	-	-	-
3/8	Hakaui, Nuku Hiva	Scattered	I	-	7
3/9	Taiohae, Nuku Hiva	0	1	_	0
3/9	Hanga Haa, Nuku Hiva	0	1	-	0
3/9	Haka Puuae, Nuku Hiva	0	-	-	-
3/9	Houmi, Nuku Hiva	0	-	-	-
3/9	Taiohae, Nuku Hiva	0	-	-	-
3/9	Hakaui, Nuku Hiva	-	1	-	4
3/23	Taiohae, Nuku Hiva	-	-	1	Few
3/24	Taiohae, Nuku Hiva	0	4	-	17
3/24	Hakatea, Nuku Hiva	0	-	-	-
3/24	Hakaui, Nuku Hiva	0	-	-	•
3/24	Bay Marquisienne, Nuku	Hiva 0	_	-	_
3/25	Taiohae, Nuku Hiva	-	9	-	30.5
4/1	Hataivea, Nuku Hiva	0	-	-	-
4/1	Anaho, Nuku Hiva	0	-	-	
4/1	Hatiheu, Nuku Hiva	0	-	-	-
4/2	Taiohae, Nuku Hiva	0	-	-	-
4/2	Hakatea, Nuku Hiva	0	2	-	9
4/2	Hakaui, Nuku Hiva	0	-	-	-
4/2	Taiohae, Nuku Hiva	-	-	2	4
4/9	Hanga Haa, Nuku Hiva	0	3	-	7
4/9	Haka Puuae, Nuku Hiva	0	-	-	-
4/9	Taiohae, Nuku Hiva	0	-	-	-
4/10	Taiohae, Nuku Hiva	Scattered	8	-	83
4/13	Hananai, Ua Huka	0	-	-	-
4/13	Hananai, Ua Huka	0	-	-	~
4/15	Motopu, Tahu Ata	0	-	-	-
4/15	Hana Tetou, Tahu Ata	-	2	-	43
4/16	Vai Tahu, Tahu Ata	0	-		-
4/19	Taiohae, Nuku Hiva	0	1	-	23
4/19	Hakaui, Nuku Hiva	0	-	-	-
4/19	Hakatea, Nuku Hiva	Scattered	2	-	42
4/20	Taiohae, Nuku Hiva	Scattered	3		34
	Total		57	3	450.5

Table 38.--Summary of bait fishing for Marquesan sardines, Hugh M. Smith cruise 45

Date,	Locality	Amount	Numbe	r of sets	Catch,
1958	Locality	per day, buckets	Day	Night	buckets
5/12	Taiohae, Nuku Hiva	-	4	-	35.0
5/12	Tai Oa, Nuku Hiva	-	3	-	5.0
5/13	Hanga Haa, and Haka	-	6	_	17.0
	Puuae, Nuku Hiva				
5/14	Taiohae, Nuku Hiva	-	3	_	35.0
5/18	Taiohae, Nuku Hiva	-	4	-	15.0
5/18	Tai Oa, Nuku Hiva	-	3	_	26.5
5/22	Tai Oa, Nuku Hiva	-	4	~	21.5
5/22	Taiohae, Nuku Hiva	~	5	-	38.0
5/26	Taiohae, Nuku Hiva	-	6	-	22.5
5/31	Taiohae, Nuku Hiva	-	7	-	51.0
6/4	Taiohae, Nuku Hiva	-	1	-	0.0
6/6	Taa Huku, Hiva Oa	-	2	-	10.0
6/6	Hana Menu, Hiva Oa	-	2	_	4.0
6/11	Tai Oa, Nuku Hiva	-	1	~	0.0
6/11	Hanga Haa, Nuku Hiva	-	4	-	20.0
6/12	Taiohae, Nuku Hiva	-	1	-	1.0
	Total	-	56	-	301.5

Table 39.--Marquesan sardine length frequency by sex,

<u>Charles H. Gilbert</u> cruise 35

	P	osition			Fo	rk le	ngth	rang	ge in	mill	limet	ers		
Date, 1957 -	Latitude	Longitude	Sex	5-44	5-54	5-64	5-74	5-84	5-94	5-104	05-114	5-124	5-134	Total
				ω	4,	ະດ	9		00	6	10	=	12	
10/13	08°56 ' S	140°05'W	M	_	+	_	-	_	-	6	2	-	-	8
			F	-	-	910	-	-	-	8	7	3	-	18
10/13	08°56'S	140°05'W	M	-	-	-	=	-	_	2	3	1	1	6 18
			F ?	_	_	_	_	_	_	2	14	_		1
10/13	08°56'S	140°05'W	M	_	_	_	_	_	_	6	2	2	_	10
,		- 10 00	F	-	-	-	-	_	-	12	5	2	1	20
10/13	08°56'S	140°05'W	M	-	~	-	-	-	3	8	1	-	-	12
			F	-	-	-	-	-	-	6	7	-	-	13
10/23	08°56'S	140°05'W	M	_	-	-	-	-	4	7	2	1	-	14
			F	-	-		-	-	-	8	4	-	-	12
10/23	08°56'S	140°05'W	M	-	-	-	-	-	-	8	1	-	-	9
			F	-	-	-	-	-	-	5	11	-	-	16
10/23	08°56'S	140°05'W	M	-	-	**	-	-	1	4	- 2	-	-	5
10/30	0005(10	1400051317	F M	-	_	_	_	_	1 5	6	2	_	_	9 13
10/30	08°56'S	140°05'W	F	-	_	_	_	_	2	9	1	_	_	12
10/30	08°56¹S	140°05'W	M	_	-	_	_	_	9	9	1	_	_	19
20,00	00 00 0	7-40 02 11	F	_	-	_	_	_	_	6	-	-	_	6
11/7	08°56'S	140°05'W	M	_	-	-	-	-	6	14	-	_	-	20
			F	7	-	-	-	-	-	5	-	-	-	5
11/7	08°56'S	140°05'W	M	_	_	-	_	3	2	2	2	_	-	9
			\mathbf{F}	-	-	-	-	-	1	10	1	-	-	12
11/23	08°56'S	140°05'W	M	-	-	-	-	2	11	10	-	-	-	23
	00000		F	-	-	-	-	-	-	-	2	-	-	2
11/23	08°56'S	140°05'W	M F	-	-	-	-	_	5	12	3	1	-	20 5
11/23	08°56'S	140°05'W	M	_	_	_	_	1	7	10	_	_	_	18
11/25	00 90 5	140 03 W	F	_	_	_	_	_	-	6	1	_	_	7
11/28	09°48'S	139°02'W	M	_	_	_	_	3	7	3	_	-	_	13
			F	-	-	-	-	-	2	-	1	-	-	3
			?	1	-	3	4	1	-	-	-	-	-	9
11/29	09°48¹S	139°02'W	M	_	_	_	_	_	-	_	_	_	_	-
			F	-	-	-	-	-	1	-	1	-	-	2
			?	***	-	I	21	1	-	-	-	-	-	23
12/2	08°56'S	140°05'W	M	-	-	-	-	-	4	11	1	-	-	16
			F	-	-	-	-	-	1	6	-	1		8
12/2	08°56¹S	140905134	? M	-	-	1	_	-	2	- 15	1	_	-	18
12/2	00 00.0	140°05'W	F	-		_	_			5	2	_	_	7
			М	_	-	-	_	9	66	133	21	4	-	233
		Total	F	-	-	-	_	-	8	97	60	8	2	175
			?	1	-	5	25	2		1		-		34
		Grand total		1	-	5	25	11	74	231	81	12	2	442

Table 40. --Marquesan sardine length frequency by sex,

Hugh M. Smith cruise 43

Date,	Po	sition			Fork le	ngth rai	nge in n	illimet		100	
1958			Sex	65 - 74	75 - 84	85 - 94	95 - 104	105- 114	115 - 124	125- 134	Total
	Latitude	Longitude	<u></u>	74	04	74	104	114	124	134	
1/22	09°48'S	139°02'W	M	-	-	-	-	-	-	-	-
			F	-	-	-	3	-	-	-	3
			?	-	-	1	-	-	-	-	1
1/25	08°58 ' S	140°10'W	M	-	2	-	11	1	-	-	14
			F	-	-	1	4	2	-	-	7
. 101			?	3	1	1	11	2	-	***	4 15
1/26	08°56¹S	140°05'W	M F	-	1	_	1	7	_	_	8
			?	_	1	1	_	_	_	_	2
2/3	08°56'S	140°05'W	: M	_	_	1	3	1	-	_	5
275	00 30 3	140 02 W	F	_	_	_	_	4	2	-	6
			?	_	1	_	_	_	-	-	1
2/3	08°56 ' S	140°05'W	M	_	2	2	10	-	_	-	14
-, -	00 30 5	210 03	F	_	1	_	2	4	1	-	8
			?	-	3	-	-	-	-	-	3
2/4	08°54'S	140°02'W	M	-	-	2	6	1	-	-	9
			F	-	-	-	3	10	2	-	15
			?	-	1	-	-	-	-	-	1
2/4	08°54'S	140°02°W	M	-	-	2	1	-	-	-	3
			F	-	-	-	6	12	4	-	22
2/4	08°54 ' S	140°02'W	M	-	-	10	7	-	-	-	17 8
2/12			F	-		-	4	3 1	1	-	17
2/12	08°56'S	140°05'W	M	1	6 2	6 3			1	_	7
			F ?	1 1			_	-	_	_	i
2/12	0085/16	140°05'W	r M	_	5	5	_	1	_	-	11
4/14	08°56 ' S	140 05 W	F	-	-	1	-	4	_	-	5
			-			•		-			
2/13	08°56'S	140°05'W	M	1	1	3	-	2	-	-	7
			F	_	1	2	1	2	-	-	6
			?	-	2	-	-	-	-	-	2
2/13	08°56'S	140°05'W	M	-	-	1	5	5	1	-	12
			F	-	-	2	-	4	3	-	9
2/13	08°56'S	140°05'W	M	-	1	4	5	3	-	-	13
- 4			F	-	-	2	3	4	2	1	12
2/13	08°56'S	140°05'W	M	-	-	-	11	1	-	1	12 13
2/12	0000000		F	-	- 2	1	1 7	9 1	1	1	15
2/13	08°56'S	140°05'W	M	1	3 1	4 1	1	6	_	_	10
			F	1	1	1	1	O	•	Ī	20
2/13	08°56¹S	140°05'W	M	_	_	1	15	5	_	_	21
-, 10	00 30 3	1-40 03. W	F	_	-	_	1	3	-	-	4
				2	2.1	12		24	1	_	185
		Total	M	2	21 5	42 13	95 30	74	17	2	143
		IOLAI	F ?	2 4	9	2	-	1.4	_	_	15_
										^	
		Grand total	l	8	35	57	125	9 8	18	2	343

Table 41. --Marquesan sardine length frequency by sex,
Charles H. Gilbert cruise 38

Data	Pos	ition			F		ngth ra			neters			
Date, 1958			Sex	45-	55 -	65-	75 -	85-	95-	105-	115-	125-	Total
1930	Latitude	Longitude		54	64	74	84	94	104	114	124	134	
2/26	08°56'S	140°05'W	M	-	-	-	-	3	15	4	-	-	22
			F	-	-	-		-	3	-	1	-	4
2/26	08°58'S	140°09'W	M	-	-	-	2	3	4	3	-	-	12
			F	~	-	-	1	5	2	1	1	-	10
			?		-	-	3	-	-	-	-	-	3
2/26	08°58'S	140°09'W	M	-	-	-	2	3	2	4	1	-	12
			F	-	-	-	4	4	-	1	2	2	13
3/3	09°54'S	139°05'W	M		-	-	1	2	5	5	-	-	13
			F	-	-	-	-	-	5	7	-	-	12
3/8	08°56'S	140°05'W	M	-	-	-	3	9	1	1	-	-	14
			F	-	-	-	3	5	-	2	-	-	10
			?	-	-	1	-	-		-	-	-	1
3/8	08°58'S	140°09'W	M	-	-	-	-	3	6	5	-	-	14
			F	-	-	-	-	4	3	2	2	-	11
3/25	08°56'S	140°05'W	M	-	-	-	-	3	2	-	-	-	5
			F	-	-	-	-	-	4	1	2	-	7
4/10	08°56'S	140°06'W	M	-	-	-	-	6	3	-	-	-	9
			F	-	-	-	-	2	4	-	-	-	6
4/19	08°56'S	140°06'W	M	-	-	-	-	1	13	5	~	-	19
	0005010	2 4000001717	F	-	-	-	-	2	3	1	_	-	6
4/19	08°58'S	140°09'W	M	-	-	-	-	_	2	8	1	1	12
			F	-	-	-	-	1	2	5	1	1	10
			?	1	1	1			-	-	-		3
			M	-	-	~	8	33	53	35	2	1	132
		Total	F	-	-	-	8	23	26	20	9	3	89
			?	1	1	2	3	-	-	-	-	-	7
		Grand total	L	1	1	2	19	56	79	55	11	4	228

Table 42. --Marquesan sardine length frequency by sex, Hugh M. Smith cruise 45

Date.	Posi	tion							n mill	imete			
1958	Latitude	Longitude	Sex	35 -	45-	55-	65-	75-	85-	95-	105-	115-	Total
1930	Latitude	Longitude		44	54	64	74	84	94	104	114	124	
5/12	08°56'S	140°05'W	M	_	_	_	_	3	6	9	1	_	19
			F	-	~	-	-	2	2	2	-	-	6
5/12	08°56¹S	140°06'W	M	~	-	-	3	11	4	1	-	-	19
			F	-	-	1	-	2	2	-	-	-	5
			?	-	~	-	1	-	-	-	-	-	1
5/12	08°56¹S	140°06¹W	M	-	-	-	2	11	1	-	-	-	14
			\mathbf{F}	-	-	-	2	2	5	1	1	-	11
5/12	08°58'S	140°09'W	M	-	1	1	-	-	_	-	-	-	2
- *			F	-	1	5	***	-	-	-	~	~	6
			?	1	8	8	-	-	-	-	-	-	17
5/13	08°54'S	140°02°W	M	-		-	~	-	2	1	-	-	3
			F	-	-	-	-	-	3	9	3	4	19
5/13	08°54'S	140°02°W	M	-	-	-	_	2	2	3	-	~	7
			F	-	_	_	_	-	8	3	2	-	13
5/13	08°55'S	140°02'W	M		_	-	_	-	5	4	_	_	9
			F	_	_	_	-	-	1	5	10	**	16
5/18	08°58¹S	140°09'W	M	_	-	_	_	1	6	7	2	_	16
-,			F		_	_	3	-	1	3	2	-	9
5/22	08°58'S	140°09'W	M	-	_	_	_	1	3	2	1	_	7
-,			F	_	-	_	1	2	6	2	_	1	12
			?	_	_	_	1	4	_	_	_	_	5
6/11	08°54'S	140°02'W	M	_	_	_	_	_	3	3	2	-	8
-,			F	_	_	_	_	-	3	8	6		17
6/12	08°56'S	140°06'W	M	_	_	_	_	1	1	13	_		15
0,			F	-	_	-	-	_	-	3	5	2	10
			М	_	1	1	5	30	33	43	6	_	119
		Total	F	-	1	6	6	8	31	36	29	7	124
		_ 0002	?	1	8	8	2	4	-	-	-	-	23
		Grand tota	1	1	10	15	13	42	64	79	35	7	266

Table 43.--Record of daily sightings of bird flocks, scattered birds, and tuna schools,

Charles H. Gilbert cruise 35

							F	ocks	_						Sc	atte	red b					Tu	na
	Noon	position			SIz	е		C	omp	oslti	on					Jane	red t	1103				sch	ools
Date, 1957	Latitude	Longitude	otal number	10	0 - 50	50	erns	Boobies	Bo'sun birds	Frigate birds	Petreis or shearwaters	Other	Albatross	Petrels or shearwaters	Boobies	Terns	rigate birds	Bo'sun birds	Storm petrels	Other	Yellowfin	Skipjack	Unidentified Little tuna
A	니	리	H	٧	10	^	T	Щ	m	ഥ	凸 ~	Ō	A	면 "	Й	H	Íz,	B	St	ō	>	S	5 7
10/3 10/4 10/5 10/6 10/7 10/8	19°10'N 16°11'N 13°12'N 10°08'N 07°12'N 04°35'N	156°00'W 154°14'W 152°24'W 150°34'W 148°44'W 147°02'W	· 2	1	1 - 1	1	2 - 1	-	-	-	2 - 1	-	-	12 23 14 23 29 12	- - - 1 6	8 14 10 -	-	- 2 2 - 2	- - - - 1	- - 2 -		1	I -
10/9 10/10 10/11 10/12	01°43'N 01°14'S 04°32'S 07°23'S	145°33'W 143°42'W 142°35'W 141°06'W	2 - 23	1	- - 11	1 - 12	1 1 - 20	- - - 18	- - - I	1 - 3	1 1 - 16	- - - 19	-	13 8 9	4 I 3 I2	20 9 20	- 2 -	1 1 2 1	I I4 - -	- - 1	-	- 2 4	 - I
10/14 10/15 10/16 10/17 10/18 10/19 10/20 10/21	08°22'S 07°48'S 08°44'S 09°38'S 10°20'S 09°57'S 09°29'S 09°34'S Taiohae,	140°33'W 139°56'W 139°20'W 138°50'W 138°28'W 139°08'W 140°02'W 139°50'W Nuku Hiva	14 5 10 9 10 8 9 2 3	1 1 - - 3 - 4 - 2	8 3 5 4 - 4 3 1	5 1 5 5 7 4 2	10 3 10 5 6 5 7 1	9 2 8 3 5 5 5	3	5 1 9 - 1 3 4 -	3 -6 4 4 5 7 1	3 1 2	-	9 38 20 17 4 12 14 5	11 47 3 16 11 8 9	111 61 10 56 26 59 62 1	11 11 3 7 2 3 5 -	-	1 - 2	8 24 21 27 - - 11	1 1 3	1 1 1 3	
10/24 10/25 10/26 10/27 10/28 10/29	09°13'S 09°56'S	139°04'W 136°15'W 137°44'W 139°33'W 139°32'W 139°25'W	3 4 9 3 2	1 1 - 1 1 1	7 2 2 4 2 1	1 5 -	9 2 3 5 1	9	-	2 1 2 -	9 - 3 4 1	1 - 2 -	-	18 5 24 14 1 23	15 2 3 3 -	8 50 20 37 61	1 11 7	- I -	- 1 - 2 5	5	- 1 1 -	1 3 -	1 -
10/30 11/1 11/2 11/3 11/4		140°05'W 139°35'W 139°39'W 139°49'W 140°27'W	2 5 4 11 14	1 2 1	2 2 2 4 11	3 1 5 2	2 3 4 9 14	3 2 8 4	-	1 2 4 5	1 3 - 3 8	1 - 4 7 10	-	1 31 11 2 18	1 3 1 3 6	7 26 6 12 32	- 4 2 2 1	- 2 - -	-	- 8 - - 33	-	- - 4	1 -
11/5 11/6 11/8 11/9 11/10 11/11 11/12 11/13	14°43'S 15°07'S 15°38'S	143°11'W 141°23'W 141°07'W 143°32'W 146°05'W 146°55'W 148°12'W 148°10'W 149°35'W	1 12 12 1 7 8 5	1 - 2 1 - 2 - 2 -	10 10 - 6 5 1	- 2 - 1 2 4	11 12 - 3 5 5 2	- 6 2 - - 5 1	-	- - 2 - 1 1 1	11 4 - 6 6 5	1 9 9 1 6 3 -	2	14 16 11 11 8 8 55 5	- - 3 - - 9 16 2	27 36 8 8 16 66 48 27 3	4 10 - 6 - 2 1	1 1 1 - 1	-	1 1 19 3 -	1	- 1 - - 1 2	1
11/19 11/20 11/21 11/22 11/24	15°30'S 13°40'S 11°22'S 09°04'S 08°17'S	147°17'W 144°40'W 142°24'W 140°12'W 140°39'W	15 7 6 13 13	1 2 1	1 2 2 7 5	14 4 2 5 8	7 3 13 12	15 5 1 6 11	-	14 2 3 - 6	13 7 5 7 9	12 5 4 7 2	-	5 19 5 8 33	35 2 3 3 13	13 17 34 17 84	2 - 2 - 7		-	8 22	- I	4 - 2 3 2	1 - 1 - 4 - 1 -
11/25	07 * 56 'S	140°01'W	8	-	2	6	4	4	-	3	4	2	_	20	16	25	24	-	-	4	-	-	1 -

Table 43. -- Record of daily sightings of bird flocks, scattered birds, and tuna schools,

<u>Charles H. Gilbert</u> cruise 35 (cont'd)

					Size		Flo	cks	mpo						Sca	tter	ed bi	rds				Tur		
	Noon po	sition								142				scho	ools									
Date, 1957	Latitude	Longitude	Total number	< 10	10 - 50	> 50	Terns	Boobles	Bo'sun birds	Frigate blrds	Petrels or shearwaters	Other	Albatross	Petrels or shearwaters	Boobles	Terns	Frigate birds	Bo'sun birds	Storm petrels	Other	Yellowfin	Skipjack	Unidentified	Little tuna
												_					_		_					
11/26	08°53'S	139°19'W	13	-	10	3	13	12	-	4	10	2	-	15	10	31	5	-	3	-	-	1	-	-
11/27	09°43'S	138°46'W	10	1	3	6	9	7	-	2	1	5	-	10	1	27	-	-	-	10	-	1	-	-
11/28	10°03'S	138°49'W	13	-	3	10	11	5	-	3	5	10	-	3	4	1	2	-	-	-	-	-	1	-
11/29	09°53'S	139°05'W	15	1	8	6	14	6	-	2	9	12	-	5	2	16	3	-	-	8	-	2	4	-
11/30	09°36'S	139°45'W	11	1	5	5	7	6	1	3	7	8	-	18	1	47	1	-	-	11	-	-	-	-
12/1	09°33¹S	139°49'W	8	_	4	4	7	3	1	_	7	7	_	6	_	11	-	_	_	2	_	2	1	_
12/2	09°05¹S	140°05'W	1	-	_	1	1	-	-	~	1	-	-	4	2	11	-	-	-	7	-	1	-	-
12/4	07°22'S	140°58'W	9	~	2	7	9	6	1	6	9	-	-	8	5	28	2	1	-	8	_	-	2	-
12/5	04°25'S	142°49'W	5	-	2	3	4	2	-	2	5	_	-	11	3	3	8	2	_	-	-	-	-	-
12/6	01°17'S	144°08'W	4	1	3	-	4	-	-	-	2	_	-	22	1	2	-	-	1	-	-	-	-	-
12/7	01°37'N	145°44'W	13	1	5	7	13	3	-	_	11	2	_	18	10	7	-	1	-	1	_	-	5	-
12/8	04°35'N	147°44'W	9	_	5	4	8	3	1	-	9	-	-	19	1	35	-	3	-	-	-	-	3	-
12/9	07°35'N	149°12'W	2	-	-	2	2	-	_	-	2	1	-	28	1	-	_	-	1	-	-	1	1	-
12/10	10°42¹N	151°08'W	_	_	_	-	-	-	-	-	_	-	1	1	-	1	-	3	15	-	-	-	-	-
12/11	13°35'N	153°19'W	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	1	2	-	-	-	-	-
12/12	16°34'N	155°07'W	_	-	_	_	_	_	_	_			1	_	_	_	_	-	_	-	-	_	_	-
12/13	19°40'N	156°06'W	_	_	-	_	-	_	_		_	_	5	-	-	1	-	-	-	-	-	-	-	-
		Total	391	39	182	170	308	195	8	102	239	158	9	810	318	1,414	153	32	49	244	9	45	33	1

Table 44. --Record of dally sightings of bird flocks, scattered birds, and tuna schools,

Hugh M. Smith cruise 43

				gii ivi				6 43															
							Flo	ocks							Sca	ttered	hird	6				Tun	a
	Noon po	sition			Siz	е		C	ompo		1 7				002	T	,				s	choo	ls
			number					1	8	blrds	etrels or shearwaters			etrels or shearwaters			birds	<u></u>	petrels				
58		e e	1 g						bird	l i	or		0	or			oir	birds	H.		۱,		Unidentified
19	de	Longitude	me		0			00		e	8 3		gn -	8 W	00		e		ad		ellowfin	🐰	t f
1	tuc	žit			50		92	oie	a un	at	ar	H	tr	el)ie	199	gate	uns	8	н	}	300	en
Date,	Latitude) uč	otal	10	1	50	erns	Boobies		Frigate	Petrel	Other	ba	Petrels shearw	Boobles	erns	rig	0,3	O I	Other	ij	Skipjack	Pi
A	Ä	Ĭ	ĕ	V	10	^	H	ñ	Bo	딥	P. B.	ँ l	A]	д "	ğ	H	F	m	Storm	ő	Ϋ́	SX	5
																	J	1	1				
1/3	21°26'N	158°24'W	_	_	_	_	_	-	_	~	_	_	15	_	2	_	-	_	_	_	_	_	_
1/4	22°02'N	157°56'W	_	-	_	-	_	_	~	_	_	-	5	1	20	_	_	_	1	_	_	_	_
1/5	18°58'N	156°16'W	-	-	_	_	_	_	_	-	-	_	11	_	3	_	_	-	3	_	_	_	_
1/6	16°03'N	154°30'W	_	_	_	_	_	_	-	_	-	_	11	_	_	1	_	1	2	-	_	_	
1/7	13°13'N	152°40'W	_	_	_	_	_	-	_	_	_	_	2	2	_	-	-	_	1	_	_	_	_
1/8	10°20'N	151°18'W	-	_	_	_	-	_	-	_	-	_	_	11	-	50	-	3	3	-	_	-	_
1/9	07°39'N	149°32'W	-	_	_	_	_	-	_	_	-	_	_	20	1	4	-	-	2		_	-	-
1/10		147°54'W	1	-	1	_	1	_	_	_	1	_	-	18	3	6	-	5	11	-	-	-	-
1/11	02°15'N	146°18'W	13	1	12	_	13	3	_	_	3	_	_	4	29	134	8	1	1	_	_	-	1
1/12	00°35¹S	145°05'W	12	-	9	3	10	4	1	3	4	_	_	_	19	152	1	1	6	_	_	-	4
	03°30'S	143°29'W	1	-	-	1	1	-	-	1	1	-	1	-	6	40	2	3	-	1	-	-	1
	06°30'S	141°40'W	6	-	6	-	5	4		3	5	-	-	8	9	4	-	1	4	-	-	1	5
1/18	08°30'S	140°40'W	10	-	1	9	10	7	-	-	9	-	-	11	29	142	6	10	17	-	-	7	3
1/19		140°14'W	13	-	3	10	12	11	-	8	7	-	-	26	24	137	15	-	1	-	-	3	10
1/20		139°04'W	10	-	4	6	10	7	-	-	2	-	-	8	11	111	5	1	20	-	-	1	8
1/21	09°26'S	138°56'W	16	~	4	12	17	9	-	6	10	-	-	99	62	171	14	1	8	-	2	8	7
1/22		138°50'W	17	-	8	9	14	7	-	8	9	-	-	49	79	246	60	-	23	-	4	6	8
1/23		139°24'W	5	1	3	1	5	-	_	-	-	-	-	25	8	79	4	-	14	-	-	2	3
	09°34'S	139°50'W	2	-	2	-	2	-	-	1	1	-	-	3	2	50	-	-	-	-	-	1	1
1/25	08°58'S	140°39'W	6	-	1	5	6	5	-	1	3	-	-	3	2	40	4	-	1	-	-	5	1
1/27	08°49'S	140°04'W	19	2	9	8	17	9	3	7	7			25	25	83	10	1	15		1	5	11
1/28		137°50'W	6	-	2	4	6	5	-	3	4	_	_	9	1	17	4	1	8	_	_	3	3
1/29		136°44'W	8	1	4	3	8	5	_	5	3			2	9	18	4	1	2	-	_	3	6
1/30		139°21'W	7	-	1	6	7	4	_	1	4	_	_	53	10	120	13	1	23	_	1	3	4
1/31	11°15'S	139°43'W	3	1	2	_	3	2	_	-	1	_	_	16	11	57	3	4	7			1	2
2/1	12°17'S	139°40'W	7	î	4	2	7	4	_	1	6	_	_	7	3	19	3	1	_	_	_	5	2
2/2	09°36'S	139°40'W	11	î	4	6	11	5	_	1	6	_	_	41	11	136	4	2	5	_	_	3	7
2/5	09°12'S	140°30'W	10	î	8	1	10	5	_	1	9	_		24	20	98	5	1	9	_	1	3	4
2/6	09°03'S	142°30'W	4	1	2	1	4	1	_	î	2	_	_	11	3	38	3	1	7	_	_	1	2
2/7	09°14'S	141°24'W	4	_	3	1	3	2	_	1	4	_	_	16	2	43	_	1	7	_	_	2	1
			-				-	_		-	-				_			-				L	
2/8	08°56'S	139°34'W	1	-	-	1	-	1	-	1	1	-	-	2	-	73	-	1	-	-	_	-	1
2/9	08°17¹S	139°40'W	10	-	4	6	10	5	-	1	5	-	-	34	27	140	11	-	18	-	-	6	4
2/10		139°28'W	11	2	8	1	11	9	-	3	9	-	-	5	3	34	2	1	6	-	-	4	7
2/11	07°28'S	139°34'W	9	-	4	5	9	6	-	3	6	-	-	17	14	130	3	2	13	-	-	3	5
2/15		140°05'W	2	-	2	-	2	2	-	-	2	-	-	2	9	32	3	-	1	-	-	-	2
2/16		141°09'W	2	-	-	2	2	2	1	2	1	-	-	6	29	46	3	-	14	-	-	1	1
2/17		143°33'W	5	-	3	2	5	2	-	1	4	-	-	5	5	13	4	-	16	-	-	1	4
	00°12'N	145°24'W	6	-	6	-	6	1	-	2	4	-	-	4	7	16	2	1	18	-	-	-	4
	03°34'N	146°55'W	2	-	2	-	2	1	-	1	-	-	-	6	4	33	5	2	7	-	-	-	2
2/20	06°49'N	148°12'W	1	~	1	-	1	1	-	-	1	-	-	12	4	2	1	4	11	-	-	-	-
2/21	10°00'N	149°00'W	11	1	6	4	11	5	1	1	11			29	7	18	10	17	8				10
		151°45'W	1	_	1	-	1	-	1	1	-	_	_	15	7	9	10	11	5	_	_	-	1
		154°00'W		_	-		_			_	_	-	_	6	5	6	1	-	1			_	1
	19°10'N	156°16'W	2		1	1	2	1		_	2	_	24	15	11	6	1		1			1	1
	IGY Stati		-		-	_	_	_	_	_	_	_	-	2	3	_	_	_	_	_	_	_	-
			254	1.2	121	110	244		,	/ =							212	/ 6	220	1		70	10/
		Total	254	13	151	110	244	135	6	67	147	-	69	652	535	2,554	213	69	320	1	9	79	136

Table 45. -- Record of daily sightings of bird flocks, scattered birds, and tuna schools,

Charles H. Gilbert cruise 38

						Flo	cke														-	Tuna	
					Size	F 10	CKS	С	omp	ositi	on				Sc	atter	ed bir	.qs				hool	
Date, 1958	Latitude	Longitude	Total number	<10	10 - 50	>50	Terns	Boobies	Bo'sun birds	Frigate birds	Petrels or shearwaters	Other	Albatross	Petrels or shearwaters	Boobies	Terns	Frigate birds	Bo'sun birds	Storm petrels	Other	Yellowfin	Skipjack	Unidentified
2/8 2/9 2/10 2/11 2/12 2/13 2/14 2/16	21°39'N 20°12'N 17°23'N 14°49'N 12°06'N 09°16'N 06°32'N 03°52'N	158°24'W 157°18'W 155°46'W 154°32'W 153°14'W 152°00'W 150°05'W	3 4 2 - 1 4	1 1 1 - 1 1	1 1 1 - 3 1	1 2	1 1 1 - 1 4	2 1	1	1	2 1 1	-	6	17 6 1 - 1 13 3 2	10 1 1 1 - - 2	5 5 - 1 5 3	2 1	- - - 1 4 -	1 1 5 9 -	2	-	2 1 1 - 4 1	1 2
2/17 2/18 2/19 2/20 2/21 2/22	02°57'N 01°53'N 00°53'N 00°11'N 00°45'S 02°31'S	150°17°W 150°20'W 150°19'W 150°02'W 150°12'W 148°33'W	1 - - - 2	-	1 - - - 2	-	2	2	-	-	-	-	-	1 - 5 2 2	5 6 7 5	1 1 11 11 1 3	1	1 - 1	2 1 4 10 3 11	-	-	1	-
2/23 2/24 2/25 2/27 2/28 3/1	04°14'S 06°28'S 08°40'S 08°34'S 07°42'S 08°42'S	145°55'W 143°08'W 140°29'W 140°36'W 140°10'W 139°18'W	2 1 14 21 17 12	- - - 1	2 1 3 3 5 2	11 18 11 10	2 1 14 20 15 12	2 1 10 13 11	- - 1 -	5 10 3 9	- 11 5 - 6	-	-	2 - 9 - 4 1	1 17 15 37 3	3 7 54 29 131 117	11 1 35 10	- - 1 2	4 5 - 2 2 1	-	$\frac{1}{2}\frac{1}{2}$ $\frac{1}{3}\frac{2}{3}$		- /10 /12 / 8 / 5
3/2 3/3 3/4 3/5 3/6 3/7 3/10 3/11 3/12 3/13	09*28'S 10*06'S 10*02'S 09*36'S 09*34'S Taiohae, 10*31'S 12*42'S 14*46'S 14*57'S	138°53'W 138°52'W 139°06'W 139°48'W 139°49'W Nuku Hiva 142°06'W 144°18'W 146°53'W 147°56'W	12 7 9 11 5 14 5 3 9	-	1 1 2 2 1 3 2 1	11 6 7 9 4 11 3 2 9 5	12 7 9 5 14 5 3 8 3	9 3 5 - 3 4 1 - 8 3	- - - - - 1 2	4 2 4 2 1 1 2 1 5	4 - 1 4 4 7 4 1 6 3		-	7 - 4 1 14 28 2 2 2	4 1 8 5 4 5 1 -	86 44 33 101 54 105 21 27 90 76	8 - 11 9 - 2 4 - 1	1 - - 12 1 - - 5 -	2 - - 2 - 1 4	-	23/	53/ 2 2 2 2 2 6 - 3 1	/ 5 4 5 7 2 7 2 2 6 4
3/14 3/19 3/20 3/21 3/22 3/23 3/26 3/27 3/28 3/29	15 *23 'S 17 *22 'S 15 *24 'S 13 *20 'S 11 *09 'S 09 *24 'S 09 *10 'S 09 *12 'S 09 *01 'S 08 *20 'S	148°08'W 149°25'W 147°14'W 144°60'W 142°52'W 140°43'W 138°58'W 136°36'W 137°54'W 139°40'W	5 1 10 8 3 21 6 1 4	1	2 - 3 5 1 2 3 - 1 2	2 1 7 3 2 19 3 1 3	4 1 10 8 3 21 6 1 4	4 1 3 2 1 2 I 3 1 2	-	1 - 4 2 1 13 3 1 4 7	2 - 1 1 1 11 4 - 2 6		-	13 - 2 1 8 11 7 9 3 8	14 8 3 - 2 3 8 4 2	30 6 27 24 9 57 72 17 34 60	2 -7 -1 9 3 2 2	2 - 1 2	2 1 - 1 - 5 - 7 5			- - - 2 2 - 1 5	2 1 7 3 2 17 1 1 2 4
3/30 3/31 4/3 4/4 4/5	05°52'S 07°25'S 09°10'S 09°08'S 09°09'S	139°38'W 139°40'W 140°32'W 143°02'W 141°22'W	4 5 11 2	-	1 4 5 2 9	3 1 6 - 2	4 5 11 2 10	3 2 3 - 6	-	2 - 3 2 2	1 2 4 1 3	-		13 406 32 1 13	7 23 8 4 4	20 44 92 21 56	- - 3 - -	- 1 - -	4 6 - 2 1	-	-	1 1 4 1 2	2 - 4 - 2

 $[\]frac{1}{2}$ Mixed schools $\frac{2}{2}$ Includes 2 mixed schools

 $[\]frac{3}{2}$ Includes 1 mixed school

Table 45.--Record of daily sightlngs of bird flocks, scattered birds, and tuna schools,

Charles H. Gilbert cruise 38 (cont'd)

						1	lock	s								44	3.1.1.				7	una	
1 1	Noon pos	ition			Size			С	omp	ositio	on				Sc	atter	ed bii	rds			a c	hool	8
958			number						birds	birds	or /aters		8	or /aters			birds	birds	etrels		c		Unidentified
-	ıde	Longitude			50		00	le 8	d nue	te]			Albatros	1 - 51	le s	23		q uns	1 2	L.	ellowfin	Skipjack	enti
ate,	atitude	60	otal	0	1	0	erns	Boobie	Во'яц	rigate	Petrels	Other	lbat	Petrels shear	oobie	ern	Frigate	0 81	Storm	Other	ello	cip)	nide
Ä	ı,	ŭ	Ĭ	\ \ \	.01	>5	Ĕ	m	m	Eq.	Ď,	ō	Ā	Ď.	m	H	됴	m	St	Ó	×	ß	Ď
4/6	10°04'S	139*41'W	9		5	4	9	5	_	1	4			37	8	131	2		5		14/	23/	/ 2
4/7	10 04 S	139 41 W	6	_	5	1	6	3	-	2	3	-	-	21	0	34	_	3	1	-	1—	2-	1
4/8	10°56'S	139°43'W	4		4	_	4	_	_	1		_	_	36	3	73	_	1	4	_	_	_	_
4/9		i. Nuku Hiva			2	ī	3	_	_	_	_	_	_	2	7	64	_	_	_	_	_	Ī	_
4/11	08°32'S	140°40'W	11	-	1	10	11	8		3	2	_	_	54	67	532	4	_	_	_	14/	¹ 3/	6
4/12	07°50'S	140°06'W	6	_	2	4	6	2	_	3	_	-	_	13	55	139	5	2	1	-	_	1	3
4/13	08°44'S	139°32'W	7	_	3	4	7	5	_	1	2	-	_	8	6	69	2	_	2	-		2.,	. 2
4/14	09°34'S	138°54'W	12	-	2	10	12	7	-	1	4	-	_	3	26	114	2	-	3	_	$\frac{2\frac{1}{4}}{1-1}$	$\frac{2}{6\frac{2}{3}}$, 4
4/15	10°12'S	138°50'W	7	_	2	5	7	5	_	3	I	-	-	3	2	85	9	-	_	-	1 4 /	23/	3
4/16	09°57'S	139°07'W	2	-	-	2	2	2	-	-	1	0	0	39	14	113	1	-	I	-	-	1	1
4/17	09°33'S	139°50'W	6	_	1	5	6	3	_	3	4	_	_	15	7	118	2	1	3	_	-	1	4
4/18	09°32'S	139°54'W	10	_	2	8	10	3	-	6	5	-	-	9	3	10	-	-	-	-	_	4	5
4/19	Taiohae,	Nuku Hiva	6	-	2	4	6	3	-	1	-	-	-	-	8	46	-	-	2	-	-	2	3
4/21	08°58'S	140°11'W	16	-	-	16	15	13	-	7	14	-	-	2	12	45	5	-	-	-	-	3	13
4/22	06°19'S	141°50'W	12	-	2	10	12	3	-	3	4	-	-	5	7	24	-	1	1	-	-	2	8
4/23	03*30'S	143°32'W	-	-	-	-	-	-	-	-	-	-	-	10	3	67	-	-	2	-	-	-	-
4/24	00°41'S	145°25°W	5	-	4	I	4	1	-	-	-	-	-	0.1	4	16	-	-	1	-	-	2	1
4/25	02°14'N	147°08'W	-	-	-	-	-	-	-	-	-	-	-	13	1	4	4	1	-	**	-		-
4/26	05°05'N	148°41'W	-	-	-	-	-	-	-	-	-	-	-	53	I	14	-	2	-	-	-	-	-
4/27	07°50'N	150°12'W	I	-	-	1	1	I	-	-	1	-	-	12	-	-	-	1	4	1	-	-	1
4/28	10°42'N	151°58'W	-	-	-	-	-	-	-	-	_	_	_	14	-	3	_	-	3	-	-	-	-
4/29	13°38'N	I53°38'W	-	-	-	-	**	-	-	-	-	-	-	10	-	2	-	-	4	-	-	-	-
4/30	16°42'N	155°08'W	-	-	-	-	-	-	-	-	-	**	_	13	-	3	-	-	1	-	-	-	-
5/1	19°33'N	156°36'W	7	-	3	4	6	1	-	2	6	-	3	4 I	15	5	15	-	0 1	-	-	3	1
		Total	398	7	118	273	377	215	5	133	149	-	9	1,080	506	3,295	181	48	152	3	165/1	02 <u>5</u> /	188

 $[\]frac{1}{2}$ Mixed schools

 $[\]frac{3}{4}$ Includes 1 mixed school $\frac{4}{4}$ Mixed school

^{5/} Includes 11 mixed schools

^{&#}x27; Mixed schools

2/ Includes 2 mixed schools

Table 46.--Record of daily sightings of bird flocks, scattered birds, and tuna schools,

Hugh M. Smith cruise 45

							Flo	cks														Tuna	
	Noon p	osltion			Size				omp		on				Scat	tered	birds					choo	
			er						18	birds	81.8			14 14		ŀ	da	23	petrels				70
58		e e	number						bird	blz	etreis or shearwaters		89	etreis or shearwaters		İ	birds	blrds	etr		Я		Unidentified
19	Latitude	Longitude	na		50			89		Frigate	e i e		Albatross	Petrels shearw	ea		Frigate				ellowfin	Sklpjack	표
te,	# #	ng t	otal	10	1	50	Terns	oobies	ans,o	iga	Petrels shearw	Other	bat	tre	oobies	erns	188	Bo'sun	Storm	Other	110	P.	ide
Date,	La	Ö	To	\ \ '	10	\ \	e H	Во	Bo	별	Pe	8	Ā	Pe	Во	e [∺	14 [24	Bo	Sto	ਰੋ	Ϋ́e	Skd	5
											<u> </u>												
3/28	Honolulu,	Hawall	_	_	_	_	_	_	_	_	_	_	8	7	_	12	_	_	-	_	_	_	_
3/29	19°17'N	156°13'W	4	2	2	~	4	I	-	1	3	-	6	24	2	22	-	-	-	-	-	-	2
3/30	16°58'N	153°54'W	~	-	-	-	-	-	-	~	-	•	3	26	-	6	-	-	7	-	•	-	-
3/31	14°56'N	151°46'W	-	-	-	-	-	-	-	-	-	-	-	16	-	2	-		4	-	-	-	-
4/1 4/2	12°56'N 10°50'N	149°32'W 147°18'W	I	-	1	~	1	-	-	1	1	_	-	31 21	-	5	_	1	3 12	-	-	-	1
4/3	08°48'N	144°56'W	_	-	_	-	-	_	_	_	-	_	_	51	_	ī	-	1	22	-	_	_	
4/4	06°50'N	142°43'W	_	_	_	_	_	_	_	_	_	-	_	93	2	2	_	2	12	_	_	_	_
4/5	05°03'N	140°02'W	3	-	3	-	3	2	-	_	3	_	-	66	-	6	-	1	55	1	_	1	-
4/6	03°02'N	140°01'W	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	10	-	-	-	-
4.10	01102121	1200501111																	,				
4/7 4/8	01°02'N 00°24'S	139°59'W 140°05'W	-	-	-	-	~	-	-	-	-	-	-	9	-	-	-	-	6 3	-	-	-	-
4/9	02°38'S	140 °02'W	-	_	_	_	_	_	_	_	-	_	_	3	_	2	-	2	1	_	_	_	
	03°48'S	140°12'W			_	_	_	_	_	_	_	_	_	6	1	_		1	1	_	-	_	-
	00°04'S	139°59'W	-	_	-	_	-	_	_	-	-	_	-	14	_	_	_	1	43	_	_	~	-
4/12	00°01'S	140°00'W	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	1	-	-	-	-
	00°02'S	140°00'W	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-
	00°01'S	140°00'W	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	2	-	-	-	-
	00°01'S	139°58'W 140°02'W	1	-	1	_	-	-	-	1	1	-	-	3		-	-	-	1	-	1	1	-
4/10	01 10.14	140 02 W	1	-	1	-	-	-	-	1		-	_	-	-	-	-	-	-	-	1	•	_
4/19	03°04'N	139°59'W	-	-	-	-	-	-	_	-	-	-	-	38	-	-	-	-	7	1	-	-	-
4/20	01°36'N	140°03°W	-	-	-	-	-	-	-	-	-	-	-	8	1	-	-	-	3	-	-	-	-
-	00°08'S	139°59'W	1	-	1	-	1	-	-	1	1	-	-	19	-	4	-	-	12	-	-	1	-
-	02°12'S	140°10'W	2	-	1	1	2	-	-	2	2	-	-	15 32	-	4	1	1 2	2	-	-	1 2	3
-	02°06'S 00°02'S	140°10'W 139°58'W	5	-	1	4	4	2	2	_	5	-	-	6	_	8 1	-	2	6 8	-	_	-	3
	00°12'N	140°09'W		_	_	-	-	_	_	_	_	_	_	8	_		_	_	1	_	_	_	_
4/27	00°05'N	140°06'W	_	_	_	-	_	_	_	_	_	_	_	7	_	_	-	_	10	_	-	_	_
	03°001S	142°06°W	4	1	3	-	4	_	_	_	1	-	-	11	2	17	1	-	2	-	-	-	-
4/29	06°32¹S	144°09'W	1	-	-	1	I	-	-	1	-	-	-	21	-	2	-	1	7	-	-	-	1
4/30	10°03'S	145°49'W	2		3	_	3		2	1	1			11	_	6	4	2	5	_	_	1	_
5/I	10 03 S	145°49°W	3 4	_	4	_	4	_	_	1	1	_	_	4	_	9	-	1	3	_	_	_	1
5/2	17°10'S	149°24'W	4	-	1	3	4	4	_	_	ī	_	_	7	47	79	1	_	_	-	_	2	-
5/6	17°27'S	149°28'W	3	_	_	3	3	3	-	1	1	_	-	7	23	53	-	1	-	-	-	-	3
5/7	17°10'S	148°33'W	8	-	3	5	6	8	2	2	6	-	-	26	23	43	3	-	1	-	-	1	4
5/8	15°14'S	146°57'W	9	-	1	8	8	9	1	2	5	-	-	2	6	31	3	2	-	-	-	3	6
5/9	12°42'S	144°24'W	5	-	3	2	5	2	-	2	2	-	-	10	-	11	-	-	-	-	-	2	1
5/10 5/11	10°28'S 08°56'S	141°53'W 140°05'W	8 4	-	5 2	3	8 4	6 4	-	4	3	-	-	17	3	15	1	1	1	_	_	-	2
5/15	09°14'S	138°58'W	5	_	3	2	5	5	_	2	4	-	-	32	51	181	10	1	9	-	_	1	2
5/16		136°27'W	3	-	1	2	3	3	-	2	2	-	-	19	8	44	2	1	1	-	-	2	•
5/17	09°16'S	138°03'W	8	-	8	-	8	5	1	5	4	-	-	21	22	65	7	3 5	4 14	-	-	2	4
5/19	09°16'S 09°17'S	140°28'W 142°54'W	9 5	1 2	4	4 I	9 5	7 2	-	7	1 1	-	-	21	21 8	250 25	13 1	2	9	_	_	1	-
	09 17 S	142 54 W	7	2	2	3	7	3	_	3	5	_	_	16	5	60	12	2	1	_	11/		_
			1/		ad ud					-	-		1			yellov							

1/ Mixed with skipjack. 2/ One school mixed with yellowfin.

Table 46. -- Record of daily sightings of bird flocks, scattered birds, and tuna schools,

Hugh M. Smith cruise 45 (cont'd)

							Flo	cks							Sc	atter	ed bir				Γ	Tun	a
1	Noon po	sition			Siz	e		(Comp	oosit	lon										S	choc	ls
Date, 1958	Latitude	Longitude	Total number	< 10	10 - 50	> 50	Terns	Boobies	Bo'sun birds	Frigate birds	Petrels or shearwaters	Other		Petrels or shearwaters	Boobles	Terns	Frigate birds	Bo'sun birds	Storm petrels	Other	Yellowfin	Skipjack	Unidentified
5/22 5/23 5/24 5/25 5/27	08°58'S 08°24'S 05°59'S 07°24'S 10°00'S	140°09'W 139°40'W 139°36'W 139°42'W	1 7 14 10 12	1 3 3 1	1 5 10 6 6	1 1 1 5	1 7 13 10 12	3 5 6 7	1 -	3 4 2 2	- 3 3 3	-	-	25 4 23 96	23 3 10 23	815 113 77 132	11 3 4 10	2	9 13 4 13	-	-	1 7 2 2	1 3 -
5/28 5/29 6/1 6/2 6/3 6/5 6/6 6/7 6/8 6/9	12°20'S 10°55'S 08°29'S 07°45'S 08°40'S 09°27'S 09°45'S 10°19'S 09°48'S 09°34'S	139°43'W 139°45'W 140°38'W 140°12'W 139°20'W 138°54'W 139°10'W 138°30'W 139°29'W 139°49'W	12 15 8 16 13 20 8 16 15	2 3 2 - 1 1 - 1	7 11 2 8 8 5 6 8 10 3	3 1 4 8 4 14 2 7 5	12 16 8 16 13 20 8 15 15	3 6 14 5 12 3 10 9 6	1 1 - 1 - - 2	1 4 2 6 4 4 - 6 2 2	3 8 2 7 - 5 - 4 6 5			13 34 5 25 16 38 10 23 33	2 48 61 8 52 20 68 20 13	47 81 453 385 417 393 196 570 268 116	2 12 28 34 3 20 3 46 12	2 1 1 2 3 4 4 8 4	2 3 2 2 11 - 20 10 4		-	7 10 4 3 2 6 1 2 3 8	1 1 1 6 2 8 2 5 4 5
	08°56'S 06°33'S 02°56'S 00°08'N 03°00'N 05°54'N 08°22'N 11°08'N 13°45'N 16°32'N	140°05'W 139°08'W 139°34'W 140°10'W 142°23'W 144°05'W 146°00'W 148°20'W 150°28'W 152°35'W	4 6 6 2 1 - 2 4 - 7 3	1	1 5 5 1 1 - 1 4 -	3 1 - 1 - 1 - - 3 1	4 6 6 2 1 - 2 3 7 3	2 3 1 1 2	1 1 1 1	2 5 3 - 1 1 2	1 2 1 - 2 4 - 7 2			42 14 21 5 12 21 92 57 33 11	13 4 2 - - 1 1 1 - - 9	143 94 37 2 3 - 3 - 1	5 - 2 - 1 - 1 2 2 2	2 1 2 - 1 - 5 5 - 1	5 4 3 6 8 8 6 2	-		1 2 1 2 2	2 2 1 1 1 4 1
		Total	322		174	120			18	96		-				5,366		84	426	2	23	89 3	

^{3/} Includes I mixed school.

Table 47. --Record of aquatic mammals sighted,

Charles H. Gilbert cruises 35 and 38,

Hugh M. Smith cruises 43 and 45

35	Deti	Time,	Po	sition	Observation	Number
Vessel	Date	LT	Latitude	Longitude	Observation	Number
CHG-35	10/7/57	1620	06°41'N	148°24'W	Porpoise	12-24
11	10/12/57	1440	07°18'S	140°49'W	11	100
11	10/12/57	0600	08°58'S	140°11'W	11	12
11	10/14/57	0944	08°39'S	140°35'W	11	10
11		1338	09°46'S	138°46'W	11	12
11	10/17/57				11	6
11	10/18/57	0530	09°56¹S	138°55'W	11	
	10/20/57	1040	09°31'S	139°54'W	11	20
11	10/29/57	1250	11°09'S	140°26'W	11	50
11	11/4/57	1305	08°13'S	140°31'W	11	3
LT.	11/4/57	1430	08°14'S	140°38'W	"	4
11	11/13/57	1734	16°13'S	148°31'W	Whale	1
11	11/24/57	0600	08°54'S	140°16'W	Porpolse	12-24
11	11/28/57	1605	10°24'S	138°43'W	11	2,000
11	11/29/57	1230	09°52'S	139°01'W	11	6
11	12/4/57	0615	07°57'S	140°42'W	11	200
11	12/13/57	1250	19°45'N	156°06'W	H	
HMS-43	1/19/58	1350	07°52'S	140°02'W	11	250
11	1/21/58	1555	09°48'S	138°51'W	II	2
11	1/24/58	1632	09°26¹S	140°06'W	†t	50
11	1/24/58	1651	09°23'S	140°08'W	11	15
	1/24/56	1051	07 23 3	140 00 #		• •
11	1/27/58	1330	08°47'S	140°00'W	11	15
11	1/30/58	1220	09°12'S	139°23'W	11	6
11	2/2/58	1400	09°19'S	139°40°W	(1)	4
CHG-38	2/9/58	1303	20°05'N	157°15'W	Whale	2
HMS -43	2/11/58	1220	07°30'S	139°34'W	f f	1
11	2/11/58	1740	08°13'S	139°32'W	Porpoise	50
CHG-38	2/22/58	1332	02°35¹S	148°26'W	11	2
HMS-43	2/22/58	1428	13°45'N	151°59'W	Whale	2
CHG-38	2/25/58	1120	08°37'S	140°31'W	Porpoise	15-25
11	2/27/58	0856	08°50¹S	140°16'W	Pilot whale	60
11	2/27/58	0948	08°46 ' S	140°22'W	Porpoise	3
11			08 49 S	140°35'W	11	100
11	2/27/58	1110	08°30'S	140°36'W	11	6
11	2/27/58	1233	08°28 ' S	140°37'W	11	30
11	2/27/58	1250	08°20'S	140°43'W	11	10
11	2/27/58	1630			11	6
	3/1/58	1429	08°51'S	139°28'W	11	5
11	3/2/58	1143	09°27'S	138°55'W	11	5
11	3/3/58	1115	10°03'S	138°52'W	11	6
11	3/4/58	1210	10°02'S	139°07'W	11	
11	3/13/58	1500	14°54'S	147°45'W	***	4
(1	3/23/58	1735	09°03'S	140°14'W	п	15
HMS -45	4/3/58	1120	08°47'N	144°54'W	Blackfish	4
11	4/3/58	1301	09°10'S	140°34'W	Porpolse	3
11	4/4/58	1509	09°09'S	143°17'W	ű	1
11	4/5/58	1215	05°00'S	140°02'W	Whale	1
11	4/6/58	0520	09°19'S	140°41'W	Porpoise	6
11	4/6/58	0605	09°30'S	140°41'W	11	13
11	4/7/58	1325	12°40'S	140°40'W	Whale	4
11	4/7/58	1450	12°56'S	140°45'W	11	-
	-, -,		12°50'S	139°46'W	Porpoise	

Table 47. --Record of aquatic mammals sighted,

Charles H. Gilbert cruises 35 and 38,

Hugh M. Smith cruises 43 and 45 (cont'd)

Vessel	Date	Time,	Po	sition	Observation	Number
Vessel	Date	LT	Latitude	Longitude	Observation	Number
HMS-45	4/7/58	1830	00°14'N	140°04'W	Sperm whale	1
11	4/9/58	0637	08°59¹S	139°57'W	Porpoise	15
11	4/9/58	0726	08°56'S	139°59¹W	11	20
11	4/11/58	0615	08°55'S	140°15'W	11	3
11	4/11/58	0630	08°54'S	140°16'W	11	2
11	4/11/58	0650	08°53'S	140°18'W	11	1
11	4/11/58	0700	08°52'S	140°19'W	11	2
11	4/11/58	0705	08°52'S	140°19'W	11	13
11	4/11/58	0922	00°33'S	140°01'W	11	1
(1	4/11/58	1738	00°00t	140°00'W	11	50
11	4/13/58	1212	08°45'S	139°32'W	Pilot whale ?	
11	4/13/58	1305	08°47'S	139°32'W	Porpoise	15
11	4/13/58	1735	00°00¹	140°00'W	Blackfish	25
11	4/18/58	1318	-	-	II	15
11	4/25/58	1205	00°12'N	140°09'W	11	3
H	4/28/58	1740	03°48'S	142°35'W	Porpoise	500
11	5/25/58	1556	07°52'S	139°40'W	Humpback whale	4
11	5/27/58	1011	09°45'S	139°40'W	Porpoise	1
11	6/2/58	1500	07°51'S	139°55'W	II OI POIDC	50
11	6/5/58	1320	09°35'S	138°50'W	11	2
11	6/6/58	1145	09°47'S	139°12'W	11	30
H	6/7/58	1440	10°34'S	138°38'W	11	5
11	6/8/58	0656	10*18'S	138°55'W	11	5
11	6/8/58	1335	09°40'S	139°39'W	11	3
11	6/9/58	1547	09°28'S	140°05'W	H	1
11	6/10/58	1114	09°04'S	140°05'W	11	10
11	6/18/58	1755	08°59'N	146°31'W	Whale	10
11	6/23/58	0805	20°58'N	157°31'W	Porpoise	6





